This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

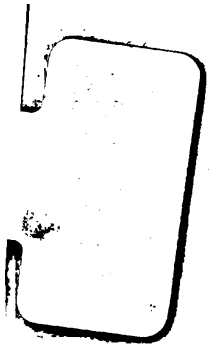
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

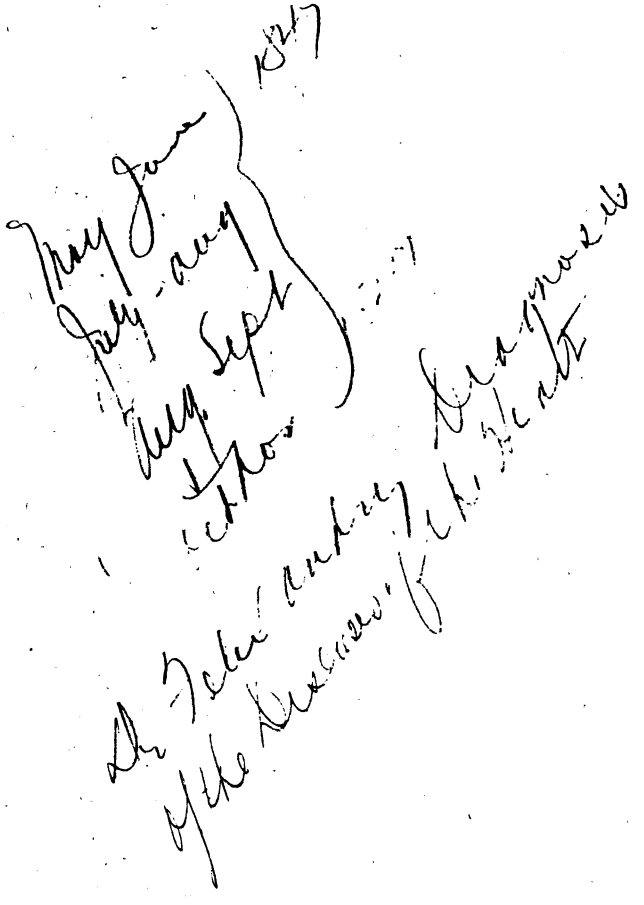
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`





THE

WESTERN LANCET.

CATALOGUED
AUG 20 1940
F. K. M.

EDITED BY

L. M. LAWSON, M. D.,

PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS AND GENERAL PATHOLOGY
IN THE MEDICAL COLLEGE OF OHIO.

BOSTON MEDICAL
AUG 2 1 '40
LIBRARY

VOLUME VI.

CINCINNATI:
ROBINSON & JONES.
1847.

ROBINSON AND CO., PRINTERS,
Corner of Third and Main Streets.

CONTENTS OF WESTERN LANCET.

FOR APRIL AND MAY, 1847.

PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—Observations on the Diseases of Green county, Ohio. By JOHN DAWSON, M. D., of Jamestown, Ohio. - - - 1

ART. II.—Observations on Cancrum Oris. By DR. T. M. TWEED, of Georgetown, Ohio. - - - - - - - 12

ART. III.—Cases of Scarlatina, with Remarks. By GEORGE K. PARDEE, M. D., of Wadsworth, Ohio. - - - - - 18

PART II.

REVIEWS AND NOTICES.

ART. IV.—A System of Human Anatomy, General and Special. By ERASMUS WILSON, M. D., Lecturer on Anatomy, London. Third American edition. Edited by PAUL B. GODDARD, A. M., M. D., Professor of Anatomy, etc., in the Franklin Medical College of Philadelphia. With 233 illustrations by Gilbert. Philadelphia: Lea & Blanchard. 1847. 8vo. pp. 610. - - - 25

ART. V.—Materia Medica and Therapeutics. By J. FORBES ROYLE, M. D., F. R. S. Edited by JOSEPH CARSON, M. D., Professor of Materia Medica in the Philadelphia College of Pharmacy. Philadelphia: Lea & Blanchard. 1847. pp. 690 octavo. - - - 26

ART. VI.—The Principles and Practice of Ophthalmic Surgery. By T. WHARTON JONES, F. R. S., Lecturer on Anatomy, Physiology and Pathology at the Charing Cross Hospital, etc. With 102 illustrations. Edited by ISAAC HAYS, M. D., Surgeon to Wills Hospital, etc. Philadelphia: Lea & Blanchard. 1847. pp. 509. 27

ART. VI.—A Practical Treatise on Inflammation, Ulceration and Induration of the Neck of the Uterus: with remarks on the Leucorrhœa and Prolapsus Uteri as symptoms of Uterine disease. By JAMES BENNETT, M. D., Licentiate of the Royal College of Physicians; formerly House Physician (by Concours) to the Hospitals St. Louis, Notre Dame de la Pitie, and La Salpetriere, Paris; formerly Vice-President of the Parisian Medical Society, etc., Graduate in the Faculty of Arts and in the Faculty of Sciences of the University of Paris. Philadelphia: Lea & Blanchard. 1847. 12mo. pp. 146. 28

ART. VIII.—Braithwaite's Retrospect of Practical Medicine and Surgery. Part fourteenth. New York: DANIEL ADEE. July to January, 1847. pp. 357. - - - - - - 29

ART. IX.—Philosophy in Sport made Science in Earnest; being an attempt to illustrate the first principles of Natural Philosophy by the aid of the popular toys and sports of youth. From the sixth and greatly improved London edition Philadelphia: Lea & Blanchard. 1847. 12mo. pp. 432. - - - - - - 29

PART III.

AMERICAN SUMMARY.

1. Cases of Pseudo-membranous Laryngitis, or True Croup, - 30
2. Poisonous Properties of Sulphate of Quinine, - - - 30
3. Bloodletting from the jugular vein in the Diseases of Children, 33
4. Treatment of Leucorrhœa, - - - - - - 34

5. Health of the Rio Grande, - - - - - 35
6. New and summary mode of creating Lawyers and Doctors, - 35
7. Quinine in Continued Fever, - - - - - 36
8. Measles incompatible with Intermittent and Remittent Fever, 37
9. Eclampsia Parturientium, - - - - - 37
10. Abortive Treatment of Remittent Fever, - - - 38
11. Creosote in Diarrhœa and Dysentery, - - - - 38
12. Treatment of Miasmatic Fever, - - - - 39
13. Stricture of the Female Urethra, - - - - 39
14. Eczema of the Scalp, - - - - - - 40
15. Chronic Rheumatism, - - - - - - 40
16. Medicinal Properties of Matico, - - - - - 40
17. Medical Appointments in the Regular Army of the United States, 41
18. Structure of the Sea Serpent, - - - - - 42

PART IV.

FOREIGN SUMMAY.

19. Typhus and Enteric Fever, - - - - - 43
20. Chomel's distinctive characters of Measles and Scarlatina, - 44
21. Coffee in Neuralgia, - - - - - - 44
22. Carbonic acid in Epidemic Cholera, - - - - 44
23. Treatment of Aphonia, - - - - - 45
24. Simple means of arresting Epistaxis, - - - - 45
25. Means of arresting hemorrhage from Leech bites, - - 45
26. Treatment of Caries of the Teeth, - - - - 45
27. Treatment of Hydrocele, - - - - - 45
28. Cold Hip-bath in Irregular Menstruation, - - - 46
29. Remedy for Toothache, - - - - - - 46
30. Civiale's Results of Lithotrity, - - - - - 46
31. Urine in Ascites, - - - - - - - 47
32. Treatment of Neuralgia, - - - - - 47
33. The action of the Acetate of Morphia on Children, - - 47

PART V.

NOTICES OF EMPIRICISM.

1. Honesty of an Empiric, - - - - - 49
2. Empiricism in Illinois, - - - - - - 49
3. A Clairvoyant Doctoress, - - - - - - 49
4. A New Doctor, - - - - - - - 51
5. Uroscopian Practice, - - - - - - 51
6. Dental Advertisements, - - - - - - 52

PART VI.

EDITORIAL DEPARTMENT.

Inhalation of Sulphuric Ether, - - - - - 53
Medical Schools in the United States, - - - - 57
Our Sixth Volume, - - - - - - - 58
The American Journal of Homœopathy, - - - 59
Resignations and Appointments in Boston, - - - 59
Buffalo Medical College, - - - - - 60
Professor Frank. H. Hamilton's Notes of a Medical Tour, - 60
Dr. J. Lawrence Smith, - - - - - - 60
The Southern Journal of Medicine and Pharmacy, - - - 60

THE WESTERN LANCET.

VOL. VI. LEXINGTON, MAY, 1847. NO. I.

PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—*Observations on the Diseases of Green county, Ohio.* By JOHN DAWSON, M.D., of Jamestown, Ohio.

The object of this is to give you a brief sketch of the diseases, with which we have been visited, during the past season. In doing this, I will, for the most part, confine myself to some very general remarks.

Early in the season the health in this region (the eastern part of Green county, O.) was pretty good. As the season advanced, the sickness, incident to summer and fall, gradually increased, until the months of September, October, and November, when our physicians were kept very busily employed.

The summer and autumnal diseases were more prevalent, so far as my own experience was concerned, than last season, although that was generally regarded as being a sickly season compared with several of the preceding.

All parts of our State, if I have been correctly informed, have not been equally affected. Our towns, as a general rule, have been comparatively healthy, while certain country situations have suffered beyond any former precedence. Nor have I been able to trace any connexion between the occurrence of certain of our autumnal diseases, and particular districts of country. Along the courses of the larger streams of water, the diseases considered peculiar to such localities, have not been more frequent, or more severe, than in the vicinity of small streams, or even in the interior.

With respect to the kinds of disease, and the relative fre-

quency of their occurrence, it may be stated, that both cholera morbus and cholera infantum have been less frequent, than in former years; while fever, *bilious remittent*, and *intermittent*, have had an almost unexampled prevalence. I have witnessed a few cases of typhus, confined to a certain neighborhood; and also some cases of angina maligna, but no scarlet fever, measles, nor not many cases of what is denominated typhoid fever.

Some of the diseases enumerated, presented phenomena, which it might be proper to consider more in detail. Because of its relative frequency and various phases of morbid action, we will say something more minute concerning

Bilious Fever.—It prevailed some in August, more in September, and, I think, obtained its greatest prevalence in October. The cases in August and September, as a general remark were of short duration, and I found them easily controlled with purgatives and quinia. Indeed, I met with no case in my own practice, that lasted more than five or six days, and often not more than three or four under the use of these means. I recollect several cases, now, attended with a high grade of arterial excitement, dry and hot skin, violent pain in the head, dry tongue, and delirium during the exacerbation, that by these means alone, and without the use of the lancet, who were placed in a state of convalescence by the end of the sixth or seventh day. I should remark here, however, that I used cold water freely externally and internally.

During the month of October, I was called in consultation with my friend Dr. J. Thorn, at that time of Clifton, but now of Yellow Springs, in this county, to see some cases of bilious fever, that exhibited a degree of malignity different from any thing I have witnessed, before or since. Believing that the notes of these cases would be interesting, I procured from Dr. Thorn a copy of them, and will here insert them.

"L. H. a farmer by occupation, about eighteen years old, of good constitution, and of good previous health, commenced complaining in the last of September with chills, followed with a moderate grade of febrile excitement, which had a remission in twenty-four hours. On the 29th Sept. he took a dose of Cathartic pills which operated freely. On the 30th, the fever being decidedly remittent in its character, he was bled and took quinine, 20 grains in broken doses.

"October 1st. At this date, he had a high fever, that had a considerable remission in the morning, full and strong pulse,

tongue moist and covered with a thick yellow coat; considerable pain in the head, back and limbs; and has had one or two motions on the bowels during the past night.—Prescription, 2 grains Calomel and half grain of Ipecac to be given every two hours until the remission in the morning; then 4 gr. of quinine every 3d hour until the exacerbation.

"Oct. 2d. At this date I found the patient very restless; pain and uneasiness in the region of the stomach; skin dry; constant nausea; pulse frequent and small; cheeks livid, with some tendency to purging.—Prescription, Calomel, Opium and Ipecac, mucilaginous drinks, an epispastic to the abdomen.

"Oct. 3. The patient at this date, was found growing worse; pulse very small and frequent; tongue dry; frequent watery discharges from the bowels.—Prescription, the combination of calomel, opium, and ipecac—continued with an infusion of sanguinaria canadensis.

"On the 4th. the evidence of a fatal issue was very strong; great restlessness; dry tongue; a prostrating diarrhœa; a shrunken appearance of the countennnce; tendency in the extremities to become cold; and a peculiar sinking sensation about the precordia.—Prescription, opium and carb. ammonia.

"The patient lingered a day or two in the above condition, and died."

"CASE 2d.—Mrs. H. was a lady of some forty, or more, years of age, and considerably addicted to paroxysms of dyspepsia. About the 3d or 4th of October she was attacked with a chill followed by fever, which went off with a free perspiration. For several days in succession she continued to be affected in a similar manner, refusing to take medicine.

"As soon as her consent was obtained to take medicine, calomel was administered followed by castor oil. After this operated, she was put on quinine which was continued until her chills entirely subsided. Notwithstanding the chills gave way, she still had fever; the tongue became dry; had a tendency to diarrhœa; rather a livid flush of the cheeks; and pretty decided evidence of sinking, the pulse growing weak and small. She took calomel and opium, an infusion of sanguinaria canadensis, and had a blister applied to the bowels, without however any apparent benefit. She became delirious and died."

"CASE 3d.—J. H. was attacked on the 3d or 4th of August with diarrhœa; severe pains in the bowels; chills followed with flushes of heat. This state of things continued some

forty-eight hours before medical aid was called. His fever, when he was first visited, was not of a high grade. But his bowel affection was very urgent. At first the stools were very dark, and, as the disease progressed, became colliquative and prostrating. The treatment in this case consisted of calomel and opium, an epispastic to the abdomen; and when prostration supervened, stimulants were freely used. The patient died on the 5th or 6th day from the date of the attack.

"CASE 4th.—Mrs. W. was a lady of apparently good constitution, was attacked with what was supposed to be bilious remitting fever about the 1st of October. When first seen (Oct. 9th,) she was laboring under a moderate grade of fever, that had a remission of mornings. Having previously to my visit taken cathartics that had operated well, and also quinine in small doses, it was concluded to increase the quantity of quinine, and there was accordingly prescribed five grain doses to be taken every fourth hour, to be commenced as soon as the remission became perceptible, and continued until she took twenty grains. On the 10th she was found with rather more fever; but other symptoms the same. Cream of tartar and jalap was administered, until the bowels were freely moved, after which the quinine was again resumed. On the 11th the tongue was found to be red on its edges with tendency to dryness; the abdomen tender with some diarrhœa; fever about the same.—Prescribed calomel and ipecac, and ordered a blister to the bowels. On the 12th the previous symptoms were found to be growing worse. To the calomel and ipecac, of the previous prescription, there was now added opium; and 2 drachms of an infusion of sanguinaria canadensis was ordered every 4th hour. Continuing to grow worse under the above prescription Drs. J. Martin and Dawson were called in, and by their advice the patient was put under stimulants, carb. ammonia and wine; the counter-irritation was also advised to be kept up over the bowels; and the free use of quinine was ordered. The diarrhœa, however continued; abdomen became tympanitic; the circulation in the extremities grew more defective; deafness supervened; and the patient died.

"CASE 5th.—J. H. was attacknd October 15th with a violent grade of remitting fever ushered in by a distinct chill. Finding the remission rather incomplete he was bled freely twice and purged with calomel, jalap, and cream of tartar. Under this treatment the fever declined, and just as convales-

ance was expected, the patient began to complain of a sinking sensation in the præcordia; there was also general restlessness and a peculiar lividity of the face, which was noticed to be present in several other fatal cases. The patient died."

The most of the above cases occurred in the same neighborhood; and three of them happened in one family. Gastro-intestinal inflammation was a prominent element of the pathology of three of them. A profuse sinking diarrhœa attended these and continued to the last.

In what is generally called bilious remitting fever, we sometimes have a certain set of symptoms, or rather a condition of the system that is perplexing to the physician. We have a patient, for example, that has been bled, purged or vomited, as the case may be, and under the use of these measures we find the pulse increasing in frequency and lessening in volume, the tongue becoming red and granulated on its edges, the abdomen getting tender; the skin continuing dry, and the bowels growing loose with a tendency to diarrhœa. Surrounded by such a set of phenomena what medicines should be administered that would be most likely to subdue the fever? Or should this design be vanished, and all attention directed to local inflammation, and the restoration of the secretions?

In attempting an answer to the first question, it becomes necessary to know whether we have any thing in our materia medica, entitled to the name of *febrifuge*. All are familiar with the fact, that in former times, it was supposed that we had no such article; and as a consequence the nearest approach to it that could be obtained, and that which was most generally adopted in its place, was the specific effects of mercury—the displacement of the fever by the substitution of the mercurial disease. Now, among those of experience in the treatment of bilious fever, particularly in very malarious districts, the opinion seems to be current, that quinine has pretty strong claims to the character of a febrifuge. It some how or other, if experience is not fallacious, puts a stop to the fever in a majority of cases uncomplicated with local inflammation.

There is then the two plans, either of which may be pursued, the plan of ptyalising, and that of trustlug to the antifebrile powers of quinine.

Concerning the relative merits of these two modes of procedure, it is not our design, in this epistolary communication, to say much.

As going to show in any thing like positive terms, that

ptyalism will put an end to fever, the evidence is scarce. We know that the fever often subsides when the mercurial disease is established. But whether this is the effect of the medicine, or of the law of self-limitation in the disease, we are unable to determine. Bearing on this matter very closely, is some information that I have derived from physicians who have accidentally salivated persons laboring under intermittent fever. They have told me, that when such was the case, that whenever the mercurial disease was strongly developed, the regular paroxysms recurred just as they had done before. If the two diseases are identical in origin, and, as is believed by many, in therapeutics also, this evidence does something towards subverting the position that the mercurial disease will put a stop to bilious fever. As a purgative, or perhaps as a cholagogue, mercury will retain the reputation so long conferred upon it; but as a specific for fever, bilious or intermittent, there are good reasons for believing that its virtues are inconsiderable, and have been, in times past, overrated.

Besides reasons, of the character given, for withholding mercury as an agent possessed of antifebrile powers, there are others, which, in a low prostrated condition of the system should have an influence in making out a prescription. I allude to the fact, which is no doubt familiar to many, that the debility incident to the use of calomel, or in plainer language, the wear and tear of the article, is of a character that makes its administration in many cases of doubtful propriety. Take for example a case where bleeding, purgatives, emetics, and perhaps no small amount of counter-irritation, have all been used, and still the patient has fever, is in a state of prostration, and has a weak and small pulse. It would be risking much in a case of this kind to attempt to induce the mercurial disease. To do it would require considerable time, and consume no small amount of the patient's strength. As a consequence, therefore, the debility produced by such a course, added to what already existed, would, to say the least of it, be very hazardous, and might give a fatal turn to the complaint.

With respect to quinine, as an antifebrile agent, the opinions of those, who have used it extensively in our autumnal intermittents and remittents, are favorable. The power it possesses of stopping the former, led to its use in the latter, and the evidence of its usefulness has been so decisive, that a great number of our practitioners in the West and South,

commence its administration, as soon as the first passages are cleared, and continue it until the fever subsides. This has been the course I have pursued during the past season. With its success I have been well pleased. In several cases that I was well satisfied were of malarious origin, where the fever was *continuous*, and attended in its exacerbation with delirium, I hesitated not to administer the medicine, and always the effects were satisfactory.

If, therefore, quinine serves as an antidote to this class of fevers, I can see no good reason why, in a prostrated or typhoid state of the system, it should not take precedence of the old-fashioned plea of ptyalizing. The evidence is more conclusive, that it is antifebrile in its character, than that mercury is. Moreover, there is little or no danger of consuming the strength of the patient, to an extent that might lead to fatal prostration.

In regard to the *second* query, viz: "should the design of curing the fever directly be waived, and all attention directed to the restoration of the secretions and guarding against local inflammation?" I have to say, that, so far as my own experience is concerned, such a mode of proceeding is not the most efficacious. It is true, that in the species of fever before us, as in fever and ague, the disease often subsides under the use of remedies addressed directly to a restoration of the secretions. Equally true, however, is it, that the complaint continues in a very large majority of cases to run its course, just as though nothing had been administered.

It is not our design to be understood, that the secretions should not be corrected. Indeed, this is indispensible, in many cases, to the success of other means. But what we mean is, that the curing of the fever should not be trusted exclusively to measures of this character. No one would think of trusting to a restoration of the secretions for the cure of an intermittent. Well, if intermittent and remittent fever are identical in origin, a position that is sustained by evidence abundant, and as we have previously agreed in the *methodus medendi* also, why not, as soon as the circumstances will admit of it, place the patient under the use of quinine, a medicine addressed directly to the cure of the fever? This plan is not only scientific, but it is, unless experience is fallacious, decidedly the most efficacious. It will, I think, put a stop to many cases that would otherwise run into a typhoid condition, and thus become protracted for weeks.

Intermittent Fever.—This, like bilious remittent fever, pre-

vailed extensively during the past season. As an original disease, it occurred not much more frequently, than as a sequel to bilious fever. In truth, I saw but few cases of bilious fever, but what terminated in ague. This was so common that the people, as well as physicians, noticed it.

I observed nothing in relation to the *types* of any interest.

Concerning the correctness of the observation, said to be original with Dr. Graves, viz: that the fits of a tertian, after having been cured and relapse again, are found to return at the same hour, and *on exactly the same days* on which they would have happened, if the tertian had continued of its original type, I can say, as yet, but little, not having investigated it sufficiently to give an opinion. Nor can I say any thing definitely in relation to the tendency, as some suggest, of the complaint to relapse at hebdomadal periods. I have made some prescriptions in view of such tendeney, but have witnessed no satisfactory result from them.

The malignant or congestive variety, described by Alibert, has not prevailed the present season, in any region of Ohio with which I am acquainted. As a general rule, the disease, I believe, has been mild, notwithstanding its extensive prevalence.

With respect to complicatious, nothing more has been observed than a tendency, in a number of cases, to vomiting at the accession of the paroxysm. It is true that many cases during the period of the febrile orgasm, were attended with a good deal of cerebral congestion, and some with delirium. These phenomena, however, readily passed off, as the paroxysms subsided.

The *treatment* of the disease before us, has generally, in this region, been entrusted to the salts of quinia. I have usually, the first thing done, adopted the practice of administering a purgative to cleanse the alimentary canal, after which the system was immmediately put under the influence of quinia, and carb. of iron. With the results of this practice, so far as checking up the complaint is conceived, I have been well pleased. At present, indeed, I can think of no case, which fell into my hands, but what yielded, sooner or later to the remedies.

In relation to the *quantity*, found to be most efficacious, there is at present, among medical men, a diversity of opinion. I have used *large* and *small* doses. In the majority of cases, I have found that powders, containing two or three grains of quinia and a scruple of carb. of iron, and adminis-

tered two or three times during every intermission, soon put a stop to the malady. To affect a cure, the quantity that will be found necessary, will depend upon a number of circumstances, such as the type, length of time with which the patient has been affected, complication with other diseases, strength of constitution, etc. I am of the opinion, that always the quantity required to stop the fits, must be sufficient to cause symptoms of the intoxication incident to the use of the article. The amount necessary to produce this effect, of course must vary according to the circumstances to which we have alluded, just in the same way that the amount of alcohol necessary to procuce drunkenness, varies.

Since *hydropathy* has been introduced among us, some have tried its efficacy in the treatment of the complaint before us. It has, however, fallen to my lot to witness but one case in which its efficacy was fairly tested. In this, the individual went through, as he informed me, the regular plan suggested by the author of the system, but it failed to give him any relief. I cured him afterwards with quinia and carb. iron.

Of not as much interest, at the present time, is the curing of the disease, as *the keeping of it cured.* I have been experimenting for some time, with regard to this difficulty, but have arrived at no satisfactory results. The mineral tonics I have been in the habit of using, as soon as the disease was subdued; and generally have kept the patient under their influence for a period of ten or twelve days. In a great proportion of the cases in former years, this practice has proved successful. But during the present season, the complaint seemed so prone to relapse, that it bankrupted, I confess, my stock of resources. If, as has been lately suggested, there is more tendency to relapses at hebdomadal periods, it would seem to be proper, that this habitude should have an influence in the selection of medicines addressed to the prophylaxis. Why, for example, should we not give quinia regularly, after the disease be subdued, until the first or second hebdomadal period has passed? Or would it be more prudent, to confine the administration of the drug, to a few of the days just preceding the period of expected recurrence?

Typhus Fever.—This malady made its appearance, during the month of November last, in a certain neighborhood. A young man had been to the State of Va., where it was said to be prevailing, and, after being home a few days, he was attacked with the disorder, and died. Four of the nurses that

waited upon him became afflicted and died. Some four or five that waited on the nurses just mentioned, took the complaint and also died. Altogether, there were twelve or thirteen cases in that particular neighborhood, two thirds of which died. This great mortality was owing to several circumstances. The malady was very malignant; and the people in the surrounding country became frightened, so that it was impossible to obtain competent persons to nurse.

All, or nearly so, of the cases, were ushered in with a sensation of languor, indisposition to physical exertions, chills alternating with flashes of heat. The stage of premonition lasted from five or six days to two weeks. During this period the tongue became coated, the edges, in most cases, red and granulated. As the malady progressed, the evidence of gastro-intestinal inflammation became more decided. The irritability of the stomach, in several cases was such, that drinks and medicines were immediately rejected. In others diarrhœa set in as soon as the disease was completely formed, and continued until the last. The bowels were tender, but there was very little *meteorismus* in any case that I witnessed. During the second, and throughout the third stage, the skin became in most cases soft, and the perspiration in several, so copious, that it operated as source of debility, and as a consequence had to be checked. As soon as the system was completely under the influence of the disease, the tongue exhibited a tendency to dryness; and, I believe, in all the fatal cases, it became dry early, and was very much chapped.

Of the method of treatment pursued in these cases, I will say something. Some of them were bled in the commencement, by the physician who first had charge of them. This measure seemed to me to do no good. The cases in which it was practiced, became very much prostrated and ultimately most of them died, apparently from exhaustion. Purgatives had to be used with great caution, owing to the tendency in the bowels to diarrhœa. I used hyd. c. creta, rhubarb, and oleum ricini. The first appeared to answer the best purpose. Against the last I became prejudiced. Opium was the main remedy relied upon to allay the distress in the bowels. On quinia, I put several patients, and continued them on it for a number of successive days. No good, nor no harm, as far as I could observe, resulted from its administration. Ptyalism was not tried in any of the cases I managed. I have no confidence in the efficacy of the measure in this form of fever. There is usually so much intestinal irritation present, that it is

almost impossible to bring on the mercurial disease; and, if it was even practicable, my own opinion, from what little experience I have, is, that it would complicate rather than cure the disorder.

Notwithstanding none of the fatal cases were post-mortemized, I have no doubt, but that the malady spent its principal force upon the alimentary canal. It is true, that the cerebral phenomena were considerable in some cases; such as cephalalgia during the course and delirium in the last stage, still the prognosis appeared to me to depend almost entirely on the state of the bowels. In those cases in which the tongue did not grow dry and chapped, and in which the tenderness over the abdomen was slight, the issue was favorable. Moreover, besides the symptoms indicating this state of things, the duration of most of the cases was such, as to lead to the conclusion that a slow process of ulceration was going on in the bowels. Several lasted six weeks, and two that recovered, were sick some two months. I saw no case in which there was any prominent thoracic disturbance.

Angina Maligna—Diptheritis.—I have witnessed but a few cases of the above disease within the last year. In two neighborhoods, seperated from each other by a distance of some fifteen miles, the disease occurred. In one of them, there was but one case, in the other, seven or eight. Scarlet fever was not present in either of the neighborhoods, at the time the disease prevailed.

In neither of the cases was there any thing like a scarlet eruption on the skin. The fauces seemed to be the primary seat of the malady. On the stamato-pharyngian mucous membrane, the lesions first made their appearance. At first they consisted of a species of inflammation, not inaptly termed "*asthenic hyperemia.*" After lasting a few days in the form of palatitis, uvulitis or tonsilitis, there was thrown out on the mucous membrane, a membraniform exudation which showed itself, first upon the tonsils; and, after extending over the fauces it gradually in some cases found its way into the air-passages giving rise to secondary croup, or to what Bretanneau calls "*diptheritis.*" In others, the secretion of the false membrane was confined to the throat, without extending into the larynx. There were five of the nine cases, in which it extended into the larynx and trachea; and in all of these the issue was fatal; the children died in from twenty-four, to forty-eight hours after this circumstance happened.

Our therapeutics, consisted in the use of emetics to cleanse

the parts, and the application of muriatic acid and tincture of capsicum, to the parts affected.

General remedies, without it, is emetics, or something to strengthen patients, when very much debilitated, are not, so far as my experience goes, of as much importance as local, or those addressed directly to the seat of the malady.

This affection generally receives very imperfect treatment, owing to the fact that it is insiduous in its advent and progress. It is not uncommon for parents to suspect their children to be affected with nothing worse than a bad cold, until the disease has done its fatal work. In most of the cases that died, the source of alarm to the parents, proceeded from the extension of the false membrane into the larynx and trachea, giving rise to the symptoms of croup. When such lesions take place, all efforts at relief usually prove abortive.

ART. II.—*Observations on Cancrum Oris.* By Dr. T. M. TWEED, of Georgetown, Ohio.

In the winter of 1841, during an attendance upon the prelections of Dr. Harrison, of the Medical College of Ohio, my attention was particularly directed to the subject of these observations: and since my entrance upon the active duties of my profession, my researches have been directed with much solicitude to the development of a successful plan of treatment for this terrible malady.

The disease has been variously denominated, cancer aquaticus, apthæ serpentis, gangræna oris, noma, stomacace gangrænosa, etc., and consists of certain sloughing or gangrenous ulcers of the mouth, accompanied with an afflux of saliva. It is almost exclusively confined to children between the second and tenth years of age. There are, however, occasional exceptions to this rule, having myself witnessed two well marked cases in adults. Writers generally have considered the disease symptomatic, though I am firmly convinced of its essential idiopathic nature. I am aware that it very frequently follows the administration of mercury; but I have long believed that in those cases, a latent *predisposition* to the disease has been aroused into action by the exhibition of mercury, just as the scrofulous or tuberculous *diathesis* is excited to activity by the abuse of the same valuable article. It is well known that certain idiosyncracies will not bear the smallest possible quantity of any of the preparations of mercury.

So it is with opium and several other valuable articles of the materia medica. Dr. Ramsbotham gives a fatal case of salivation from fifteen grains of blue mass taken in three doses, one every night.

Dr. Crampton, in the fourth volume of the Transactions of the Dublin College of Physicians, relates an instance in which two grains of calomel, caused ptyalism, extensive ulceration of the throat, exfoliation of the lower jaw, and death. And Dr. Hamilton says that three grains of Blue pill given within three nights, created such an intense salivation that for a month, the lady's life was in extreme peril.

Dr. Christison relates a case in which three drachms of mercurial ointment employed in the way of inunction, produced violent salivation, and death in eight days.

Dr. Alley, in his work on Hydrargyria, speaks of a child ten years of age, in which three grains of calomel produced a severe eruption over the entire surface of the body.

Professor Harrison, in an essay on the diseases induced by mercury, says, that in persons who have been severely ptyalized, he has seen a single grain of calomel, or a few grains of blue mass, renew, after a lapse of months, a painful degree of salivation. Dr. H. further observes: "An inscrutable peculiarity of constitution, renders it a matter of great peril for some persons to take mercury in any shape. Sir W. Philip mentions the case of a lady in whom salivation was caused by one fourth of a grain of blue pill; and in another lady's case, one grain of calomel, equally distributed in eighty pills of extract of liquorice was prescribed—one pill to be taken at a time—but that the eightieth part of a grain of calomel, so affected her with depression and irritation as to compel the abandonment of the remedy." In the first year of my practice, I witnessed a case in which five grains of calomel produced terrible ulceration of the gums, cheeks, and throat, final mortification, and death. It will thus be seen that the practitioner should be extremely careful in the exhibition of this powerful agent—particularly should he be guarded in its administration to children. It is well known that salivation in young children is peculiarly hazardous.

To sustain the view which I have taken in the commencement of this essay, namely, that cancrum oris is an idiopathic disease, I will barely refer to the fact that it frequently follows an attack of rubeola, and other eruptive diseases, in which none of the preparations of mercury have been administered.

Sometimes it appears as an epidemic in crowded and ill-ventilated hospitals. Hence has arisen, I presume, the idea of its contagious character. More commonly, however, it has no appreciable origin—not being preceeded by any disease or the exhibition of any medicine. How shall we account for these things if the disease be purely symptomatic? To say that gangrenous erosion of the cheek is mercurial disease, when it has not been preceded by the use of mercury, is to employ a contradiction of language. To say that it is always dependent on a vitiated state of the stomach and bowels, as is maintained by some writers, is to say that which every tyro in medicine knows not to be true. It differs widely from stomatitis, inasmuch as it depends for its peculiarity more upon an œdema of the part, and a congestion of the capillaries, than an active inflammation. It differs, also, in the absence of pseudo-membrane, in the great and rapid extension of ulceration, in the accompanying hard engorgement, in the abundant flow of saliva, in the eschar in the cheek or perforation of its substance, and in the destruction of the bones and teeth. The gangrenous odour too is peculiar.

From these facts I have come to the conclusion, that cancrum oris is as much a disease, *in itself*, as scrofula; that the injudicious use of mercury in certain constitutions, excites the gangrenous diathesis into action; and that the want of vitality in certain low forms of fever exerts a similar influence.

Etiology.—A debilitated habit predisposes greatly to the malady. Imperfect diet, impure air, low, damp situations, and inattention to cleanliness, aid much in the development of the disease. In short, I feel safe in the assertion that no case occurs in which a cachectic state of the system does not obtain.

Semeiology.—The most graphic description of the disease which I have seen, is from the pen of Dr. Willis in his "Illustrations of Cutaneous Diseases." In all cases which Dr. Willis has seen, the disease appeared to begin in the gums. These parts, he observes, without having exhibited any degree of previous swelling, though they may have been red and painful for some time, seem to lose their vitality on the surface, and especially along the margins in contact with the neck of the teeth. The living structures in contact with the sphacelated portions, are red and painful, and bleed with the slightest touch. There is at the same time a considerably increased secretion of saliva, which dribbles from the mouth,

especially when the patient is asleep, and the breath becomes horribly offensive. The teeth now become loose, and unless the disease ceases to make progress of itself, or a check is given to it by the interference of art, the alveolar processes perish from necrosis, and the teeth drop out. The disease at the same time generally extends, either inwards involving the tongue, or outwards implicating the cheek internally, which then presents a sloughy spot, having the same general appearance as the gums. This is a very serious symptom. A grey, or livid, or dark colored purple spot then appears on the cheek externally, which by and by becomes black, and then shrivels and dries: the whole thickness of the cheek has been stricken with gangrene: and though the extent of the part so involved may at first be no more than a split-pea would cover, the mischief extends with frightful rapidity. The sphacelated spot on the second day will have the magnitude of a four or sixpenny price; on the third of a shilling or quarter of a dollar; on the fourth of a half-dollar or dollar, and so on; the mischief extending to the same extent internally, the soft parts losing their connections with the bones beneath, and the bones themselves becoming affected with necrosis.

Such is a brief outline of a most formidable malady—a malady which destroys nineteen out of twenty of its victims. When a patient, however, is so fortunate as to recover, it is generally with surprising rapidity. This probably is owing to the fact, that in this form of gangrene, the blood-vessels resist more than any other tissues the destructive influences of the disease. They maintain their integrity to the last. When sphacelation ceases, they pour out fibrin copiously, healthy granulations spring up, and the parts heal with but very little disfiguration. This latter fact is strikingly exemplified in the happy termination of a case which occurred but a few months ago, in the practice of my friend, Dr. Lewis, of Adams county.

Treatment.—Three indications are to be fulfilled in the treatment of gangrenous erosion of the cheek, viz.,

1st. To correct the gangrenous tendency of the system;

2nd. To control the local action of the disease; and,

3rd. To support the system.

Emetics, aperients, and saline and antimonial medicines have been recommended to fulfill the first indication, and to correct the disordered states of the system generally. General blood-letting is said to be wholly inadmisible, though the

topical application of leeches is much relied on in the commencement of the disease.

I mostly rely upon topical remedies. In the early stage of the disease, vesication of the affected part, followed by a poultice of carrots, yeast, and slippery elm bark, often arrests its further progress. When these fail, and sloughing is fairly established, a local stimulant is required, of sufficient power to insure the adequate contraction of the over distended capillaries of the affected part. For this purpose I have used sulphate of copper with great advantage.*

Should this application fail in arresting the disease, nitrate of silver in substance, muriate of soda, muriatic acid and honey, caustic potash, and muriate of ammonia, should each in succession be tried. M. Videl strongly recommends the use of nitric acid.

Dupuytren's favorite application was bark and charcoal powder mixed with lemon juice.

Dr. Henry Hunt, who has written largely upon the subject, recommends chlorate of potash, and his experience in the article seems to be confirmed by subsequent experiments of other practitioners.

Chlorate of lime is employed as a local agent by M. Taupin, and according to his statement, with much success. I suppose that the chlorates act as detergent and antiseptic remedies, by means of their chlorine, which being loosely combined, is disengaged by the slightest affinities. If, however, we rely upon antiseptic medicines, why would not creosote fulfill a most important indication? It is evidently a powerful agent, and well worthy a fair trial.†

I cannot conclude this imperfect notice of the local treatment of Cancrum Oris, without briefly referring to a practice lately introduced into favorable notice by Henry Obre, Esq., late assistant surgeon to the St. Marylebone Infirmary. I allude to the application of the actual cantery. "It has been used," says Mr. Obre, "in this disease by Baron Isnard,

---

* ℞. Sulph. Crupri ʒi.
Cinchon a ʒiss.
Aqua font. ʒviii M. fiat.

To be applied to the cheek by means of pledgets saturated with the solution.

† Since writing the above, I find the following observations in reference to the efficacy of creosote in similar diseases, in Professor Dunglison's valuable work on "New Remedies: " "In scurvy and scorbutic ulcers, M. Coen found its use followed by excellent results, and he refers to cases in which it has been administered internally with great advantage. J. L. da Luz considers it an excellent cleansing remedy in atonic ulcers, but its prolonged use, he thinks,

and was named to me by Dr. Hennis Green, at whose recommendation I have repeatedly used it with marked benefit. The application of a red hot iron to the face appears a formidable measure; but it may be done without producing pain. When I have used it, the patients did not appear concious of its application. A flat piece of steel being introduced along the side of the tongue to defend it, the heated iron is to be well applied over the entire gangrenous parts. When any spot has been left untouched, the gangrene, when arrested in other parts, will at this point advance. After the cautery has been used, a yeast poultice may be applied. In a day or two the slough is thrown off, when granulation and contraction of the wound soon take place." *

But we are not to rely wholly upon topical applications. The depraved habit of body, and debilitated state of the system, which almost invariably accompany an attack of cancrum oris, and which bring on a condition of the constitution "in which inflammation in any part has a strong tendency to run into gangrene," demand our serious attention. Hence the use of emetics, and other constitutional remedies as proposed by Dr. Willis.

In this disease, a typhoid state of the system generally obtains, in which case tonics, of course, are indicated. I prefer quinine and Dover's powder in combination, and repeated as circumstances seem to demand. The preparations of iron are very useful where there is no febrile excitement; where there is fever, diluted sulphuric acid is a good substitute. Alcohol and wine are sometimes given as stimulants. Of course the practitioner need not be reminded, that it is the worst species of empiricism to prescribe merely for the *names* of diseases. He must, then, exercise his judgment, and be governed by the symptoms, in the administration of either tonics or stimulants.

---

retards cicatrisation. In hospital gangrene, he esteems it the best antiseptic, and the most powerful means of checking its terrific progress.

"In gangrenous or sloughing ulcers, Hahn used it. Several times a day he pencilled the slough with pure creosote, and in the intervals fomented it with creosote water. According to Reichenbach, two offensive affections of the labia pudendi—the consequence of infiltration of the blood—were cured by it; and Reich and Sir Francis Smith treated with success, cases of CANCRUM ORIS, and the former, one of scorbutic ulceration of the gums."

* Edinburgh Medical and Surgical Journal, of January, 1844, page 105.

ART. III.—*Cases of Scarlatina, with Remarks.* By GEORGE K. PARDEE, M.D., of Wadsworth, Ohio.

The following cases of scarlatina occurred here last November; and are interesting, not only from the fact that they exhibit in a strong light the malignant character of that disease, but also because they gave rise to some diversity of opinion, and some discussion, whether they were truly cases of scarlatina; in which some toxicological questions are involved. This may be seen in the details of the cases.

CASE I.—This was a little boy about four years old. He was attacked at night, November 15th, after having been asleep an hour or more, with great distress, headache and difficulty of breathing, soreness of throat &c. His feet were put into warm water, and in a little time he vomited, to the relief of the difficulty of breathing. Some ipecac was administered, which was immediately rejected, and again repeated with a similar result. Soon there began to be purging; and there continued to be vomiting and purging until a short time before death. The discharges were tinged with bile, both by vomiting and stool, which were copious and liquid. There was also much thirst. Within twenty-four hours from the attack, the skin was covered with *a scarlet efflorescence;* his thaoat externally swollen; internally, the fauces was red; much difficulty of swallowing; croupy respiration, and pulse rapid. Forty-eight hours after the attack, the deglutition was so difficult as to prevent the swallowing of drink through the night. There was some delirium; the eruption still continued—next day the same—in a few hours more he became delirious, and then comatose, and died seventy-two hours from the time of the attack.

The treatment consisted of mucilages, rubefacients, and once cupping a few hours before death.

Post-mortem appearances forty hours after death.—Bowels lank; no eruption perceptible on the skin; stomach about half full of yellow bile, mucous coat covered with a few scattered red patches. Intestines healthy, except that there was an intussusception of the small intestines of about two feet invaginated, in about six inches of intestine below, so as to fill it completely. The invaginated portion was gorged with blood, but not sphacelated or softened. No fæces in intestines above or below, nor any fluid in vicinity, above invaginated portion. Heart and lungs healthy. *Larynx intensely inflamed,* and much diminished in size. Epiglottis tumid, and rima

glottidis nearly closed. *Pharynx inflamed*, and there was pus all about the upper portion of it and root of tongue. Tonsils enlarged and inflamed.

CASE II.—On the evening of the 18th, a daughter aged six years was attacked with symptoms very closely resembling the boy's, viz: vomiting and purging; great thirst; redness and soreness of fauces; headache; and in twelve or eighteen hours, *a scarlet efflorescence* over the cutaneous surface. Vomiting fluid, and tinged of a greenish yellow color; and dejections frequent and liquid, and of a greenish cast, with some portions of tanacious mucous. Next day symptoms all aggravated—respiration hurried and wheezing; thirst urgent; throat swollen externally, and deglutition difficult; tongue red at edges, the rest white with the papillæ red and elevated; skin red and rough. Had blue pills and laxative injections, and demulcent drinks and counter irritation. Cupped over stomach, and blister applied and a few grains calomel administered. There soon began to be a livid appearance of the lips, suffusion of the eyes, incoherency and convulsions for five or six hours, and death thirty-six hours after the attack. There were seen two of the berries and a few of the seeds of the solanum dulcamara in the stools on the night preceding death; and also one lumbricoides. There were clusters of the berries of the sol. dulc. hanging in the house accessible to them.

Post-mortem appearances sixteen hours after death.—Stomach partially filled with a dark green fluid; one point of redness about the size of a shilling near cardiac orifice; softening of whole mucous membrane of stomach. Bowels healthy, except intussusception of small bowels in five or six different portions both upwards and downwards, but not much length to the invaginations. Liver healthy; bladder contracted but healthy. No fæces in intestines, but some fluid below invaginations. No leave obtained to examine the throat.

CASE III.—In the afternoon of the 18th another son, less than two years of age, was attacked with vomiting, purging, thirst and sore throat, and in a day or so a *scarlet efflorescence* over the surface. He recovered and *there followed a desquamation of the cuticle.* In his stools were also seeds and berries of the *solanum dulcamara.*

CASE IV.—The mother of the children was attacked on the 19th with chilliness, headache, and sore throat, and distress; and on the 20th at evening, all the symptoms increased, with sickness at stomach, and *scarlet efflorescence* over the

surface. Throat externally swollen; salivary secretion increased; tongue red at edges with red streak through the middle, the rest white. She recovered.

CASE V.—A few days subsequently, another girl, eight or nine years old, was attacked with similar symptoms, but to a less intense degree. The *scarlet efflorescence* and *anginose symptoms* were present. She recovered in a few days, and shortly after had pain and soreness of the extremeties and anasarca. She eat some of the bitter sweet berries, some weeks before her attack, and her sickness was ascribed *to the irritation caused* by the acrid quality of those berries.

CASE VI.—A young lady who was living in the family was subsequently attacked with symptoms peculiar to the former cases, but less severely; but the *anginose symptoms and scarlet efflorescence*, were prominent. She recovered.

Subsequently, scarlatina occurred in different parts of the town, sporadically; and in a few weeks it might be said to be prevailing as an epidemic. The cases were generally mild, but of all grades of severity, from the mildest sore throat to the most severe; but most of them were accompanied with the *scarlet efflorescence of the skin.* Many of them having desquamations of the cuticle, and many others having secondary anasarcous affections, and sometimes congestion of internal organs, of which the following will give an idea:

CASE VII.—L. B., age sixteen, was attacked with mild symptoms of scarlatina—had sore throat, headache, &c., with *scarlet efflorescence* appearing early; and he apparently recovered without resorting to any medical adviser. He was attacked with symptoms of congestion of the brain after being out at work at some light labor; being seized with pain, and a protracted chill, and in a short time became comatose, and died in about thirty hours. Recourse was had to bleeding largely, cupping, counter-irritation, croton oil, &c., but with no relief to the symptoms.

The toxicological question which arose was first: Whether the berries of the solanum dulcamara are poisonous; and 2nd. Whether cases 2nd and 3rd were cases of poisoning with those berries.

And strange as it may seem, there were found medical men who advocated the affirmative of both these propositions; and who, to maintain their consistency, were obliged to *assume* that case I. was also one of *poisoning* with the *dulcamara*, although he was not known to have eaten any of the berries, neither was it suspected until they were seen in the

stools of cases II. and III; and also that case V. was produced *by berries eaten several weeks before;* and all because of the close resemblance of the symptoms in the six cases which I have detailed, showing conclusively an identity in the cause productive of the disease. I design my remarks to have a bearing upon those questions.

It is worthy of consideration, that scarlatina may prevail in every variety of form, from the mildest to the most malignant; that it may prove fatal in a few hours, or it may be protracted several days; that it is Protean, simulating many diseases and is most prone to be severe in the earlier cases, the *poison* seeming to lose its virulence in some measure, or exhaust itself, or become weakened as it diffuses itself. And again, who is not aware that children are the greatest sufferers by it? It may be remarked here of scarlatina in general, that there are two classes of symptoms, either of which being present, are decisive of the disease, viz: those which belong to the throat and obtain the designation of anginose, and the scarlet efflorescence or eruption of the skin. They may both be present, or either of them singly, and the disease be perfectly well marked and distinct. Without them, the diagnosis becomes more obscure, and is only made clear by the prevalence of scarlatina as an epidemic, and the shortness of the period of the illness, being so brief that these diagnostic symptoms are not allowed time to develope themselves; the system being overpowered by the scarlatinous poison, and sinking too soon for nature to stamp upon the disease its characteristic symptoms. There is another set of symptoms I might have mentioned here as giving decisive evidence of the existence of scarlatina, though not necessary to the making out of a full and complete case; yet when present affording indisputable proof of scarlatina—a case being as full and complete without them. I refer now to the desquamation of the cuticle, and the anasarcous effusions which follow scarlatina as a sequence. It is considered additional evidence which renders it conclusive, where the disease has been ambiguous in its several stages, when these sequences appear.

It will be seen that the cases which I have detailed had no lack of the diagnostic symptoms. In all of them there was the *scarlet afflorescence of the skin*, and also the *anginose symptoms*; and in case 3rd *disquamation of the cuticle*, followed as a sequence, and in case 5, *anasarca*. What then, it may be asked, was there lacking to make out a *clear undisputed case of scarlatina?* Every essential symptom was present. But

there was vomiting and purging; and it was alleged by those who contend that these were cases of poisoning, that vomiting and purging afforded evidence of poison of an irritant character, introduced into the stomach; and that the berries of the solanum dulcamara gave rise to these symptoms, and acted upon the skin to produce the scarlet eruption, in the same manner as mushrooms are sometimes known to do.

How many practitioners of medicine may be found, who, during the prevalence of scarlatina as an epidemic, have witnessed vomitings and purgings such as I have detailed in tne foregoing cases time and again: it is no new thing—read Armstrongs essay on scarlatina; and above all, Graves' Clinical Lectures, in which he gives an account of its prevalence in Ireland in 1834, in which vomitings and purgings of the peculiar character I have described were the most prominent symptoms throughout the disease. This symptom only indicates that the mucous membrane of the alimentary canal is suffering from the disease; or that the brain, as in Ireland, is the suffering organ, and the vomiting and purging sympathetic of the cerebral disease.

Again, the boy in case first is not known to have eaten any of the berries, and was not suspected of it until after his death; so that it is all gratuitous, so far as respects his case,—so also in case four, it is known there were none eaten—and in case five none eaten for some weeks preceding her illness. Cases six and seven were also known not to have eaten any of them. It may, therefore, I think, fairly be concluded, that the berries eaten in cases two and three had no agency in modifying the disease in any degree; for there were no symptoms present in these cases which were not also present in the others.

And again, if we should admit that the berries of the bitter sweet are irritants, (which I by no means do) the symptoms would not resemble those I have detailed taken in mass. How, on this assumption, are we to explain the swollen throat? the red tongue and difficult deglutition? the severe and rapidly fatal prostration? Are they narcotics? What narcotic produces such symptoms?

But again, it is urged that the inflammation of the stomach, and the intussusception of the bowels, are evidences of an acrid irritant having been taken, such as is alledged that the sol. dulc. is. Here I would remark, that the solanum dulcamara is not classed by authors among the *narcotico-acrids*, but among the *narcotics*. On the contrary, inflammation of

the stomach is among the lesions which follow severe cases of scarlatina, as may be seen by conculting Professor Chapman's essay on that disease; and invaginations are only evidence that the peristaltic action is disturbed, by some causes, such as crude indigestible food. In Eberles' Practice, vol. 2, page 337, he says: "Invaginations of the small intestines frequently take place in children, and occasion but slight and temporary inconvenience."

But I proceed to another consideration of the case—are the berries of the Solanum Dulcamara poisonous? On this point there is much uniformity among the authorities—nearly all the old writers class them among the narcotics, and all the modern ones call them inert or nearly so—there are but few exceptions to this remark. Of the former class it may be sufficient to remark, that they are so set down in Hooper's Medical Dictionary, and Coxe's Dispensatory. In the latter work where the opinion is quite positively expressed, it may be a question whether the narcotic, which was in the mind of the writer, was not the *atropa belladonna*, in common language called *Deadly* Nightshade, which is known to be a powerful poison, instead of the Solanum Dulcamara, commonly called *Woody* Nightshade; the two plants having the same generic name of *Nightshade* might easily be confounded, and the proporties of the *atropa belladonna* be erroneously ascribed to the solanum dulcamara. And, indeed, Christison, in his admirable work on poisons, assures us that authors have thus confounded the two articles from the similarity of names, and have ascribed the poisonous properties of the atropa belladonna to the solanum dulcamara.

But as I remarked, nearly all the modern writers call the solanum dulcamara nearly or quite inert; among which it is sufficient to mention, "Orfila on poisons;" Beck in his work on jurisprudence; Taylor's jurisprudence; the article on the solanum dulcamara in Wood & Bache's dispensatory; Periera's Materia Medica; Dunglison's Therapeutics, and last, though not least, Christison on poisons; all of which concur in the opinion in regard to the qualities of the solanum dulcamara—an array of testimony which it would be impossible to meet by adverse opinions of equal weight in the medical world.

But it may be alledged that location, or some peculiar cause may modify the effects of an article, so that although not generally poisonous, it might be in the case under consideration. And this idea receives some support from the fact

that the potato, when it grows in the dark, is said to become poisonous.

Now the solanum dulcamara, the berries of which were eaten in two of the cases which I have detailed, grew upon a dry open situation, with no external circumstances about it which could modify its general character. The plant corresponded with the description of the solanum dulcamara in the books, so that here was no room for suspicion. With a view to test the quality of the berries, I procured all that remained upon the vine from which those were taken, of which the children eat, and the following are the results:

Experiment 1.—I took 100 berries from the stems, (they weighed a little more than an ounce,) mixed them with some mashed potato, and gave them to a middle sized dog. No perceptible effect followed. On the day following I gave him 205 berries, mixed as before, (they weighed 2 ounces.) I could not perceive that the dog was any way affected by them.

Experiment 2.—I gave a small dog 100 berries. No effect being produced, I next day gave him 200. There could not be perceived any sensible effect from them, though this and the first dog were carefully watched.

Experiment 3.—A young man eat 60 of the berries. Next day he perceived no effect from them, and took 120 of them. On the day following, his urine appeared tinged of a yellowish color. It is worthy of remark, that there were no evacuations from his bowels until the day after he took the last dose, and then the skins and the seeds appeared in his stools. There was no other effect perceptible.

Experiment 4.—I gave a small sickly boy, 9 years old, 20 berries, and the day following I gave him 40 more. There did not appear to be any sensible effect produced by them in any way.

Experiment 5.—A young lady eat 30 berries. No effects followed.

Experiment 6.—A young man eat 30 berries. No effects.

These experiments, although alone not entirely conclusive, yet taken in connection with experiments detailed by Christison and others, render the question of their being poisonous, no longer *debatable.*

PART II.

REVIEWS AND NOTICES.

ART. IV.—*A System of Human Anatomy, General and Special.* By ERASMUS WILSON, M.D., Lecturer on Anatomy, London. Third American edition. Edited by PAUL B. GODDARD, A.M., M.D., Professor of Anatomy, etc., in the Franklin Medical College of Philadelphia. With 233 illustrations by Gilbert. *Philadelphia:* Lea & Blanchard. 1847. 8vo. pp. 610.

Every anatomical student will doubtless be gratified to learn, that the *third* London edition of Wilson's Anatomy has been re-printed in the United States. As no insignificant evidence of the merits of the work, we may mention, that it passed through three editions, in London, within the period of four years, during which time *five thousand copies* were sold; and when we remember, too, the many works of high merit which have proceeded from the British press, and which rank so high with the profession of that country, scarcely a doubt can remain that the present treatise has gained its almost unprecedented popularity solely *through merit.*

Mr. Wilson's treatise does not consist of a meagre detail of descriptive anatomy;—a tedious account of the names of bones, origin and insertion of muscles, etc., which have so justly attached to anatomy the epithet of "a *dry*" study; but while these indispensable parts of the science have received their merited attention, the work is at the same time rich in descriptions and illustrations of *general anatomy.* This is an important feature. While the student is learning descriptive anatomy, the tedium of the study is relieved, and his knowledge more rapidly advanced, by combining with it a brief but accurate knowledge of the origin, formation and intimate structure of the elementary tissues. With such a course of instruction, the student is prepared to extend his studies; he is prepared to enter upon the next branch in course, physiology; and while he is thus led on by easy and natural transitions from one department to another, he becomes thoroughly and intimately imbued with the philosophy

of the subject, and becomes a *rational* instead of a *technical* anatomist and physiologist.

We know of no *Text-book* that will compare with Mr. Wilson's. The author has been most fortunate in combining to the best advantage, clearness, comprehensiveness, and brevity —elements indispensable in a text-book. The editor and publishers have performed their duty in handsome style, and deserve the thanks of the American profession. The *third* edition, which is now before us, has been considerably extended and improved; and we trust will find its way to every American student. For sale in Lexington by C. Marshall, Main street.

ART. V.—*Materia Medica and Therapeutics.* By J. FORBES ROYLE, M.D., F.R.S. Edited by JOSEPH CARSON, M.D., Professor of Materia Medica in the Philadelphia College of Pharmacy. Lea & Blanchard. *Philadelphia:* 1847. pp. 690 octavo.

This is a new work on Materia Medica and Therapeutics, and as such we have looked for its appearance with some interest. Not so much have we desired to see the work, because another on the same subject was very much needed, but chiefly because the high praise, in advance of its appearance, led us to expect something vastly superior to any of its predecessors. Perchance our calculations were unreasonable; it may be so. But we are compelled to say, and we do it conscientiously, that in our judgment, it is in all respects, decidedly inferior to Pereira, to say nothing of other works on the same topics.

If Dr. Royle's book had met our eye, as a mere treatise on Materia Medica, our disappointment would have been less than it is. But purporting to treat of Therapeutics, as it does, we had a right to look for something in that regard, at least up to, if not above, mediocrity. Viewed *therapeutically*, the work is a failure. Indeed, it strikes us as being designed for the basis of a course of lectures by a Professor of the department, with abundance of blanks, to be filled up, as he proceeded in the development of his various topics. As such it will answer sufficiently well, for pupils in attendance on medical lectures, and is a pretty fair guide. And if it would not be deemed impertinent, we would venture the suggestion, that in the next edition, care be taken to increase the therapeutical department, at the expense of that which relates to natural history.

The arrangement of the work is quite as good as any that we have seen; and the views of classification about as philosophical. We are decidedly in favor of the alphabetical order, in every book on this branch of medical science. It is less embarrassing than any other, and permits a man to take a fuller breath and to feel his way much more to his own satisfaction.

We have noted a number of errors, as we regard them, which do not appear to be typographical. Such as the statement on page 313 which ascribes the poisonous action of oxalic acid to its *corrosive* property, rather than to absorption. Also on page 436, where we are told that *quinia* exists in yellow bark combined with *cinchonic* acid, while on the same page, it is said, that the yellow bark contains *kinate* of quinia. On page 273, the directions in reference to the management of *opiate* poisoning are too meagre, and not sufficiently precise. On page 440, the largest dose of sulphate of quinine named, is a scruple; whereas, we of the West know that it is often administered in doses of 40 to 60 and 90 grains. On page 496, the prophylactic power of extract of belladonna in reference to scarlatina is barely named, without any sort of direction as to the mode of exhibition.

The above are only a very few defects of the kind with which the work abounds; and really we are compelled to say, that the wood cuts are not of much advantage to the volume. Unless such modes of illustration exhibit a pretty fair approximation to nature, their absence can hardly be just ground of complaint.

The publishers merit our thanks for the very neat manner in which this book has been brought out; and regarding it as a treatise in fact, on Materia Medica, only, we commend it to the notice of the profession. For sale at the bookstore of Mr. C. Marshall, Lexington, Kentucky. T. D. M.

ART. VI.—*The Principles and Practice of Ophthalmic Surgery.* By T. WHARTON JONES, F. R. S., Lecturer on Anatomy, Physiology and Pathology at the Charing Cross Hospital, etc. With one hundred and two illustrations. Edited by ISAAC HAYS, M. D., Surgeon to Wills Hospital, etc. *Philadelphia:* Lea & Blanchard. 1847. pp. 509.

The object of the author of this work, has been to arrange a treatise which shall serve as a text book for students, and

as a reference for practitioners. The author informs us, that he has studied to express himself with clearness and precision; and we may add that he has been entirely successful. The arrangement, in general terms, is such as the various subjects naturally suggest, and is therefore the most appropriate which could have been made. In some of his divisions the author is, perhaps, unnecessarily complex and technical; an example of which will be on page 81, in which Opthalmia is divided into an unnecessary number of genera and species. This, however, is a minor defect, and by no means overshadows the merits of the work.

As a text book, for the student, and a work of reference for practitioners, Mr. Jones' treatise is not inferior to any hitherto published. The name of the distinguished American editor, is indeed, a guaranty of its usefulness; and although he has not found it necessary to make many additions, yet those which have been introduced are judicious and in keeping with the spirit of the work. The pictorial illustrations are numerous and appropriate, which render the descriptions much more intelligible to the student.

For sale in Lexington, by C. Marshall.

ART. VII.—*A Practical Treatise on Inflammation, Ulceration and Induration of the Neck of the Uterus: with remarks on the value of Leucorrhœa and Prolapsus Uteri as symptoms of Uterine disease.* By JAMES HENRY BENNETT, M. D., Licentiate of the Royal College of Physicians; formerly House Physician (by Concours) to the Hospitals St. Louis, Notre Dame de la Pitie, and La Salpetriere, Paris; formerly Vice-President of the Parisian Medical Society, etc., Graduate in the Faculty of Arts and in the Faculty of Sciences of the University of Paris. *Philadelphia:* Lea & Blanchard. 1847. 12mo. pp. 146.

The opening of this little volume is truly formidable. We are notified in the very title page that the author obtained the office of House physician, in *three* of the Parisian hospitals, and that by *concours*, too; that he was formerly Vice-President of the "Parisian Medical Society"—which, we presume, means a small English Society formed in Paris—and still further, that he is a graduate in the Faculty of Arts and in the Faculty of Science of the University of Paris. And then follows the dedication page, on which is found the names

of Gendrin, Emery, and Jobert, to whom this duodecimo volume of one hundred and forty-seven pages is "gratefully dedicated." And if to all this we add a preface of half a dozen pages, by no means wanting in self-commendation, we will be very apt to arrive at the conclusion, that the author's modesty is not one of his most prominent qualities.

Under cover, however, of this excessive self-laudation, there are many valuable practical suggestions. The author seems, indeed, to have devoted no small share of attention to diseases of the cervix uteri; and his practical details serve to set forth to good advantage, several modes of practice now becoming popular. He makes especial reference to the employment of the actual cautery, so freely used by M. Jobert. The work will be found, upon the whole, useful and interesting, and is therefore valuable to the practitioner.

ART. VIII.—*Braithwaite's Retrospect of Practical Medicine and Surgery.*—Part fourteenth. *New York*: DANIEL ADEE. July to January, 1847. pp. 357.

The present number of this valuable periodical is quite equal to any of his predecessors, which is evidence that the industry of its indefatigable editor has not relaxed. We regard Braithwaites' Retrospect as one of the most valuable of the foreign publications; it is, indeed, a *mirror* which reflects nearly the whole of the periodical literature of the age. Every practitioner should possess it.

For sale by C. Marshall, Lexington.

ART. IX.—*Philosophy in Sport made Science in Earnest; being an attempt to illustrate the first principles of Natural Philosophy by the aid of the popular toys and sports of youth.*—From the sixth and greatly improved London edition. *Philadelphia:* Lea & Blanchard. 1847. 12mo., pp. 432.

The character and objects of this little volume are fully set forth in the title page. It is a curious compound of novelty, sport and science; it will at once amuse and instruct, and cannot fail to be advantageous, in many respects, to the juvenile readers. For sale by C. Marshall, Lexington.

PART III.

AMERICAN SUMMARY.

1. *Cases of Pseudo-membranous Laryngitis, or True Croup.* By J. F. Meigs, M.D.—(*Am. Jour. Med. Sci.* April, 1847.) Dr. Meigs details several cases of membranous croup, and the treatment adopted. In the treatment the following remedies were adopted: 1. *Bleeding*, both from the arm and by leeches. 2. *Emetics.* When full vomiting was desired, *powdered alum* —the alumen of the pharmacopœia—was employed. Small doses of tartar emetic, and hive syrup, were occasionally used. 3. *Calomel.* This agent was given freely. 4. *Caustic*, locally applied. ℞. Nitrate of silver, grs. x; aqua. ʒi. It was applied by means of a brush, two or three times a day. 5. *Warm bath.* The author prefers *alum* as an emetic; and his preference is based upon its prompt and certain action. It is best given in fine powder, mixed with honey or syrup; the dose is a teaspoonful of the powder, repeated in ten, fifteen or twenty minutes, if necessary. The author prefers it, also, on account of its operating without producing prostration.

Dr. Meigs mentions the membranous exudation observed in the fauces, and its extension to the larynx. This is one of the most interesting features of croup, and is not generally sufficiently urged. The local application of the nitrate of silver is one of the most important remedies that can be employed. Dr. Meigs used it in the proportion of grs. x. to ʒi. of water; but double or quadruple that strength would have been better.

---

2. *Poisonous Properties of Sulphate of Quinine.* By Wm. O. Baldwin, M. D., of Montgomery, Ala.—(*Ibid.*)—Dr. Baldwin adverts, in decided terms, to what he regards as the poisonous effects of quinine. These are manifested in the human subject in many cases, by *restlessness, tremors, slow and irregular breathing, dilatation of the pupils, blindness and convulsions.* With the view of determining, as far as possible, the

poisonous effects of quinine on the animal system, the author performed various experiments on dogs, of which he gives the following summary:

"*Symptoms* which followed the ingestion of large doses of quinine into the stomach of dogs:—*restlessness* generally preceded all other symptoms, as was indicated by the animal changing its position often, and constantly moving from place to place. *Vomiting*, or, in those cases where the esophagus was tied, efforts to vomit succeeded. *Purging* was noticed occasionally, but in no instance except where the medicine was taken by the stomach. Then came on *muscular agitation*, or *tremulous movements* of the body and extremities, with a *constant motion of the head*, resembling somewhat *paralysis agitans*. In attempting to walk, the dog would totter from side to side, and fall, or if he maintained his feet, would walk in a direction different from the one which he seemed to desire. When under the full operation of the poison, the power of locomotion, or even the power of standing in the erect position was lost altogether, the extremities apparently *completely paralyzed*. This state was accompanied with more or less *excitement of the vascular system;* the pulse increasing in frequency, and rising from 110 to 160, and in one instance even as high as 240 per minute. *Great oppression of the breathing* was present, and sometimes *frothing at the mouth*.

The *dyspnœa* in all instances was excessive, sometimes panting, at others, *slow* and *labored*, resembling in a most striking manner, an acute attack of asthma; countenance expressive of great distress and anxiety. The *pupils of the eyes were invariably dilated*, and generally to an enormous extent, leaving but a small extent of the iris perceptible, and *vision*, as well as could be judged, *was entirely lost*. *Convulsions* were observed in every case (except one) which was watched to its termination, where the dose given was sufficient to produce death, and in one or two instances where the medicine failed to produce this result. *Furious delirium* was present in one case, as was manifested by the dog barking and biting at every thing about him. Sometimes a *profound coma* would ensue, accompanied with slight *muscular agitation*, *slow* and *heavy breathing*; terminating in death in a very few minutes after the poison had been taken, and in a few instances the subject seemed as if stunned by some sudden and powerful blow, or violent fit of apoplexy. This latter effect, however, was only observed when it was given to young dogs (half grown and under) through the jugular vein or peritoneum.

Its effects upon puppies seemed to be *proportionably* much greater than upon dogs fully grown.

The time required to produce death varied very greatly with the quantity given, and the age of the subject, as well as the mode and manner of its administration, and in some instances it varied considerably when the dose, mode, and all other circumstances of its administration were supposed to be equal; for whilst in some instances fifteen or twenty grains produced the uniform and peculiar train of toxical symptoms, succeeded by death in a very short time; in other instances it required these quantities doubled and repeated until 120 grains had been taken, and a much longer time to produce the same results. This fact is in accordance with my experience relative to its remedial action upon the human subject, showing that it is governed more, perhaps, in its modus operandi by inherent idiosyncrasies, or created predispositions, than any other remedy. The modes of giving it adopted, were by the stomach, the cavity of the abdomen, and by the jugular vein. When given by the stomach, it produced vomiting, and was thrown back generally before a sufficient amount to produce death, could be absorbed. By dissolving and largely diluting in water a sufficient quantity was absorbed to produce death, in this manner in one instance. In almost all of the experiments with it by the stomach, however, the œsophagus was ligatured. When dissolved and given by the *stomach*, its first effects were observable in about twenty minutes, and sometimes shorter or longer, and death resulted in from one to thirty-six hours, usually in four or six. An empty stomach facilitated its operation greatly. When injected into the *peritoneum* in full doses, (40 grs.) its effects were appreciable in from four to six minutes, and death occurred in from thirteen to thirty minutes. When injected into the *jugular vein*, (in giving it by this mode great care was taken to prevent the admission of air,) its first effects were manifest in a space of time so short as to be almost inappreciable; not more than a few seconds after the nozzle of the syringe was withdrawn, and death occurred in one or two minutes. In all instances, except one, the quinine was dissolved in water by the addition of sulphuric or other acid in quantities barely sufficient for this purpose."

"*The post-mortem appearances* were equally uniform with the symptoms before death. The most prominent and characteristic appearances were the *dark*, *fluid* and *defibrinated* condition of the *blood*, and the *congested* state of the paren-

chyma of the *lungs*, resembling very much *red hepatization*. The vessels of the membranes of the brain were engorged, so also were the liver and kidneys in a few instances. The stomach and bowels were vascular and highly injected in patches. The membranes of the spinal cord were more or less vascular, and in one instance, a semi-fluid coagulum of blood was found in the upper half of the theca vertebralis. This was probably owing to the subject being very young, and the convulsions being much more violent and frequent than in any other instance."

"When the stomach is in condition to bear it, its absorption and activity can be greatly facilitated by *largely diluting* it with warm water. When dissolved and diluted in this way, even when given in what may be termed "heroic doses," provided the quantity to be taken is divided and given at intervals of one, two or three hours, its deleterious effects may always be avoided *and the remedy persisted in with safety* in the absence of any manifestation of its influence, which we should never feel safe in doing when giving the "insoluble de sulphate," whether in the form of pills or powders; for, in the former case we will always be advised of its unfavorable influence early enough for a timely withdrawal or modification of the dose. When given in this way, a given quantity seems to produce a greater effect and in a much shorter time, than even a larger quantity when prescribed in either of the other forms, so that besides being a much safer mode, it is a more economical one, both as regards time and medicine; and the reason seems entirely obvious, for by dissolving and diluting it largely in this way, besides being *dissolved ready for the absorbents*, it is brought in contact with a much larger absorbing surface, and many particles which otherwise might lodge about the contents of the alimentary canal and thus pass off with them, in a state of solution would readily be taken up and appropriated by these vessels."

---

3. *Blood-letting from the jugular vein in the Diseases of Children.* By C. C. Hildreth, M. D.—(*Ibid.*)—Dr. H. strongly recommends bleeding from the external jugular vein in preference to the arm, temporal artery, or leeches. The following is the method which he advises:

"The nurse having exposed the right shoulder of the child, and secured the clothing from the flow of blood, seats herself upon a low chair, and in holding the child across her knees carefully confines the arms. The surgeon seated at her

side, receives and secures the child's head between his knees. With the thumb of the left hand, he now compresses the jugular where it crosses the first rib; while the remaining part of the same hand is employed in fixing the chest of the child against the person of the nurse. The right hand of the operator being at liberty, he makes a free opening into the vein with whatever form of lancet he is accustomed to use. The blood is received in a cup, the edge of which applied a little below the orifice, likewise serves to compress the vein. From a robust child blood escapes with astonishing rapidity, particularly when the child cries or struggles. No effort should therefore be made to quiet the patient. His cries should rather be encouraged, as they expedite very much the operation. A sufficient quantity of blood is very soon lost to produce the constitutional effect required. The color of the lips and cheek of the child will tell the surgeon when syncope approaches, much more certainly than will his finger upon the pulse. The quantity of blood desired, having been lost, a compress is applied to the orifice, and the pressure taken off the vein below. After the child becomes quiet, the compress is removed, and the wound closed by a piece of court or adhesive plaster, which the physician should always carry with him for the purpose. This is much the best dressing. The bandage and compress usually advised is very objectionable. It not only obstructs the free return of the blood from the head, but its presence irritates the patient, and if not well adjusted, may promote the flow of blood or interfere with respiration. If, however, all pressure be removed from the vein below, blood will not escape if no dressing be applied, except the child cry or struggle. We therefore much prefer, if the *proper dressing* be not convenient, to leave the orifice uncovered, and direct the nurse to apply the compress for a moment, should blood escape during the cries of the child."

---

4. *Treatment of Leucorrhœa.*—(*N. Y. Annalist.*)—For several years I have been in the practice of using for this disease, a weak solution of Chloride of Lime as an injection, with the most gratifying success. In that atonic condition of the parts, the result of this disease, or of abuse, or both, in which the womb lies low in the vagina, as though it lacked the support of this organ, I think this remedy will be found to afford more relief than any that, to my knowledge, has ever been proposed. For the Pruritus sometimes attending this disease, and which is so frequent and so distressing after

the cessation of the catamenia, it has never as yet disappointed me. The solution I use is made by infusing for an hour, half an ounce of the chloride in a quart of cold water.

---

5. *Health of the Rio Grande.*—(*St. Louis Med. and Surg. Jour.*)—In a communication by Dr. GEORGE JOHNSON, we find the following paragraph:

"The Mexicans in Matamoras, and those who live at the ranches in the neighborhood are as healthy a looking people as I ever saw. I visited, during the months of July and August last, many ranches, where I saw children, and I do not remember to have seen one child that had an unhealthy appearance. In many regions of this (Mississippi) valley, during the same months, it would not be surprising to find half the members of every family laboring under remittent and intermittent fevers. The only sick Mexican I saw whilst in the country, (except the wounded in the Hospital at Matamoras,) was a woman, with intermittent fever, at Brazos Island. I was afterwards informed by an old Frenchman, who had lived for many years on a ranche near Matamoras, that the fever and ague was the only disease that prevailed in the neighborhood, but that the "chills" were not as severe as those he used to have in Louisiana—here the patient got well in a few days, without, perhaps, being obliged to keep the bed.

"I have remarked that the Mexicans have, universally, good teeth—an indication, certainly of good health, and I venture the assertion, that there are as many old people, according to the population, as can be found in any part of the United States. I will further state, that in Matamoras, I became acquainted with several American merchants who had resided in that city for several years. They informed me that the country was healthy—that they had enjoyed better health in Mexico than in the United States. I therefore believe that the great mortality amongst our troops upon the Rio Grande, during the last summer was owing to the imprudence of the men—to bad cooking—to a neglect of proper police, in most of the volunteer regiments, and to the necessity which compelled the soldier to lie upon the wet ground during a rainy season."

---

6. *New and summary mode of creating Lawyers and Doctors.*—(*Ibid.*)—The celebrated act of our Legislature, to which

we have above alluded, among other provisions, contains the following:

"SECTION 7. Every person, or co-partnership of persons, in this State, who shall follow the practice of the law for a livelihood, in whole or in part, IS HEREBY DECLARED TO BE A LAWYER; and every person, or co-partnership of persons, in this State, who shall follow the practice of medicine for a livelihood, in whole or in part, is hereby declared to BE A PHYSICIAN."

Our law schools and medical colleges may now close their doors forever, and our young men need no longer trouble themselves with the dry and musty details of the law, or with the tedious and uninteresting process of attending medical lectures. For, who will hereafter be stupid enough to go through a laborious course of study, for the purpose of obtaining a diploma, when, by the solemn act of the Legislature of a sovereign State, he is declared to be a lawyer or doctor, solely by hanging out his shingle!! Verily we live in a remarkable age, and in a wonderful country! Hitherto sages and philosophers have been unable to discover a royal road to learning, or the art of effecting by the simple act of volition, that, which under ordinary circumstances, it would require a lifetime to accomplish; but what the hoary-headed sires of antiquity could not do, has been made plain and easy by the wiseacres of the Missouri Legislature. We recollect in our school-boy days, to have read of a certain Roman General who gained infamous notoriety by attempting to confer the honors of knighthood on his horse, but it never entered into our poor philosophy to dream that it was reserved for modern "*progressive democracy*," to confer the honors of literary institutions, indiscriminately on all, without reference to moral or intellectual qualification. O, tempora! O, mores!!!

---

7. *Quinine in Continued Fever.*—(*Western Jour. Med. and Surg.*)—Dr. Robards, in an article on the diseases of the Army makes the following observation: "One fact I observed in the management of this fever, which strikes me as worth recording; that is that *quinine invariably aggravated all the symptoms.* If experience should prove this to be always the case, will it not go far to prove that the cause of intermittents and remittents differ from that of the continued fever?

8. *Measles incompatible with Intermittent and Remittent Fever.*—(*Ibid.*)—It may be worthy of remark, and I noticed it in a hundred instances, that though intermittent or remittent fever often preceded measles, it never accompanied or succeeded it during the march; diarrhœa, on the contrary, almost invariably followed it.

---

9. *Eclampsia Parturientium.*—(*Ibid.*)—From a paper by Dr. JOHN DAWSON, we select the following summary on two points, viz: causes and treatment.

To sum up our remarks on this head, we submit the following conclusions:

1. The complaint is sometimes the result of primary disease in the brain, as when it proceeds from violent mental emotions, from headache and other cerebral distress during pregnancy, or from epilepsy and other circumstances in early life predisposing the patient to cerebral hyperemia.

2. Most frequently it seems to be developed at the time when the uterus and abdominal muscles are at their greatest state of distension; and hence it is right to regard these conditions as standing, in many instances, in a very close relation to the cause of the complaint.

3. It may depend on irritation of the uterus, from a dead fœtus.

4. It may be caused by overloading or irritating the alimentary canal with indigestible food.

5. Some cases appear to depend on great exhaustion from hemorrhage.

6. It may depend upon habitual constipation;

7. Upon a peculiarly irritable condition of the nervous system of the uterus;

8. Upon violent labor pains.

In concluding our remarks on the treatment of this malady, we submit the following positions:

1. Each case of the disease is likely to have some peculiarity, and therefore requires discrimination in regard to the selection of remedies.

2. Bloodletting is not only the most general remedy, applicable to almost all cases, but it is also the most valuable.

3. The extent to which depletion should be carried will depend not so much on the violence of the convulsions as upon the habit of body, strength of constitution, etc., of the patient.

4. Opium, emetics and cathartics have considerable value as auxiliaries.

5. Delivery by art is a measure of great value, but should never be performed without strict regard to both mother and child.

---

10. *Abortive Treatment of Remittent Fever.*—By Professor Ford.—(*South. Med. and Surg. Jour.*)—An analysis of the symptoms points to this then, as the prominent object, in every stage and every degree of the disease, as long, at least, as it preserves a paroxysmal character. Whilst it generally happens, that opportunity is afforded for the use of depletion, by bloodletting and other evacuations, during the paroxysm, yet the pathology which teaches that the Remittent fever is the main affection, forbids us to allow the first remission to pass without attempting to accomplish this primary indication, even if evacuations may not have been previously employed. This object may be accomplished by the use of sulphate of quinine—universally acknowledged to be the specific of Intermittent fever, indicated also, as the specific of Remittent, by the fundamental similarity of these two affections, and known to be so, by all who have thus used it. The interval between the paroxysms being shorter than in the intermittent form, the doses must necessarily be larger, in order to administer the requisite quantity, before the period of the next accession—from five to ten grains, hourly, according to the length of the remission, to the extent of fifteen, twenty, or fifty grains. For in determining the quantity, the rule laid down in the treatment of malignant intermittents, serves for the guide here, viz: the quantity to be directly proportioned to the degree of danger apprehended from the coming paroxysms; thus in malignant remittents, the largest, and in simple remittents, the smallest quantity.

---

11. *Creosote in Diarrhœa and Dysentery.*—(*Ibid.*)—Dr. Mays adds his testimony in favor of the efficacy of creosote in bowel affections. He says:

"The form of diarrhœa to which creosote appears particularly applicable, is that, unaccompanied by much pain and febrile excitement, but which, after the operation of a mild aperient, requires the use of absorbents, and astringents to check the frequent watery alvine dejections. These cases are common enough, and the physician is seldom called in to prescribe for them; never, indeed, unless the diarrhœa resists for

some time, all the various astringents used in domestic practice. In such cases, I can confidently recommend the creosote as being speedy and certain in its effects; restraining the discharges, but not producing constipation. This effect has been produced in all the cases in which it has been prescribed, and is, in my opinion, its chief recommendation."

Two prescriptions are employed: 1. *Emulsion:* ℞. Gum arabic, ʒi; loaf sugar, ʒi; creosote, gtt. iv; water, ʒij. M. 2. *Pills:* ℞. Opium, grs. viij; creosote, gtt. v; liquorice sufficient to make eight pills. These preparations should be so administered that an adult will take, as a medium dose, about half a drop; for children ⅛ to ¼ of a drop. The presence of fever, the author suggests, would forbid its employment.

---

12. *Treatment of Miasmatic Fever.*—(*Med. Examiner.*)—Dr. Upshur concludes a paper on miasmatic fever with the following summary:

"1. In a large majority of cases, no matter of what type the fever is, the 'preparatory treatment,' so called, is worse than useless, causing a loss of time which is often fatal to the patient.

2. A large dose of quinine, (15 or 20 grains,) administered at once, produces a more certain and permanent curative impression upon the system, than small doses (1 or 2 grains) frequently repeated.

3. Quinine in *large* doses, when administered in the hot stage, so far from exciting the circulation, acts as a decided sedative upon it—the pulse in every instance lessening in force and frequency under its influence. The dogma, therefore, that 'quinine in fever is poison,' must be discarded.

4. In *uncomplicated* miasmatic fever, mercurials are not at all essential to a complete and permanent cure. They may sometimes be given with advantage in cases where cathartics are indicated at the onset of the disease."

---

13. *Stricture of the Female Urethra.*—Prof. Bedford, in his last Introductory Lecture, details an instance of siricture of the female urethra. The case had been previously mistaken for prolapsus uteri, and treated with abdominal supporters, pessaries, etc. Upon examination the uterus was found perfectly healthy, and in its natural position. He remarks:

"In passing my finger along the *urethra*, the patient experienced a sensation of pain, and this circumstance, together with the difficulty of which she complained in passing water,

attracted my attention especially to this point. I could detect no disease in the uterus or vagina; in attempting to introduce an ordinary female catheter into the urethra I was completely foiled; and, on minutely examining the condition of this passage, I discovered that the lady's sufferings were entirely due to a *stricture of the urethra*. *Stricture of the female urethra* I had never seen previously to this occasion; and, as far as my knowledge extends, no case of the kind had ever occurred in this country; at least, no record has been made of it. Velpeau, in his great work, cites but three cases of *stricture of the female urethra*, and remarks that its occurrence is extremely rare. In the course of three months, I succeeded in removing the stricture, and the lady returned to her home entirely restored to health.

---

14. *Eczema of the Scalp.*—Dr. MOTT's prescription.—(*N. Y. Med. & Surg. Rep.*)—A woman aged 50, stated that she had been troubled with this eruption for nearly two years. Dr. Mott said that the surest remedy in such cases was Fowler's solution, but he would now direct the bi chloride of mercury, 2 grs. to 4 ounces syrup of sarsaparilla; a teaspoonful of the mixture three times a day.

---

15. *Chronic Rheumatism.*—(*Ibid.*)—A man 40 years of age, had chronic rheumatic pains. He was directed the following mixture:

℞. Syr. Sarsaparilla, ℥iii.
Tinct. Colchici, ℥i.
Hyd. Potassa, ʒiii. M.

Thirty drops to be taken three times a day.

---

16. *Medicinal Properties of Matico.*—(*Bost. M. & S. Jour.*)—Dr. RUSCHENBERGER makes the following observations:

"The *matico yuba del solado*, Piper Augustifolium, which has within two or three years past, attracted the attention of the medical profession in England, was first brought to the United States by myself in 1834. It is said to have been accidentally discovered in 1824, at the battle of Ayacucho, by a soldier who was severely wounded, and in his anxiety to staunch the flow of blood, he pulled the leaves growing within his reach, and applied them to the wound, and the bleeding instantly ceased. He communicated the discovery to his wounded companions who found its application equally efficacious. In Peru and Bolivia it became well known as a

styptic, and has been externally used in the treatment of ulcers, but, so far as I can learn, it has not been employed internally up to this time.

I have used it internally in tincture, two ounces to the pint, prepared by displacement; in powder, in doses of a drachm mixed in a wine glass of water, repeated every two hours, in uterine hæmorrhage; and in cold infusions, (by displacement) half an ounce to the pint. It exerts a remarkably beneficial influence in menorrhagia, hæmatemesis, hæmoptysis, leucorrhœa, catarrhus vesicæ, and irritable bladder. It does not offend the stomach when given in powder or infusion (dose a wine glasss full); in tincture, in drachm doses, is not complained of, but when carried to a half ounce I have seen it produce nausea. I have seen it arrest bleeding instantly from small arteries, even while the blood flowed in jets, and after lint, pressure, &c., had totally failed. To arrest the bleeding from leech bites, and the troublesome hæmorrhage which sometimes follows the extraction of a tooth, I think it will be found a very certain remedy. When used to arrest bleeding, it should be in coarse powder, and moistened with cold water. A strong tincture, four ounces to the pint, might possibly answer. The taste is not unpleasant.

---

17. *Medical Appointments in the Regular Army of the United States.*—(*Nat. Int.*)—To persons desirous of entering the medical staff of the regular army, the following information from a responsible source will be acceptable:

It is prescribed by law that "no person shall receive the appointment of assistant surgeon in the army of the United States unless he shall have been examined and approved by an army medical board, to consist of not less than three surgeons or assistant surgeons, who shall be designated for that purpose by the Secretary of War."

Applications for permission to be examined for the appointment of assistant surgeon must be addressed to the Secretary of War; must state age and residence of the applicant; and must be accompanied by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible station, and for performing ably the arduous and active duties of an officer of the medical staff. These proving satisfactory, invitations are accordingly sent to the applicants.

The medical board of examiners rigidly scrutinizes the pre-

tensions of each candidate, taking into consideration his physical qualifications and moral habits, as well as his professional acquirements; and reports favorably upon no case admitting of a reasonable doubt, as the health and lives of the officers and soldiers are objects too important to be committed to ignorant and incompetent hands.

---

18. *Structure of the Sea Serpent.*—(*Bost. Med. & Surg. Jour.*) At the last converzatione of the Warren Club, an association of literary and scientific gentlemen of this city, Prof. Agassiz gave his views of the probable external structure of the far-famed sea-serpent, whose visits on our coast are placed beyond doubt by a chain of concurrent testimony strong enough to establish any fact. It is the opinion of this eminent naturalist, that the extraordinary reptile so often described by sea-faring people and others, is intermediate in structure and organization between the ichthyosaurus and plesiosaurus, monsters that lived at an extremely remote and undefined geological period in the history of our earth. He supposes that this marine nondescript must have paddles, like those ancient fish lizards, but it is uncertain in regard to the mode of respiration, whether it is effected by lungs or gills. That point has not yet been determined in his mind in regard to the plesiosaurus, and he has lately written to Dr. Owen on the subject. It was the unqualified opinion of Cuvier, however, that the plesiosaurus not only breathed air, but that it also had very capacious lungs. From the circumstance that the ribs bear a striking resemblance to those of the chamelion, the great French naturalist suggested that the animal might have been a kind of marine chamelion, having the power of changing the color, and thus eluding the pursuit of its rapacious and formidable enemies. Such a property would be in accordance with the general law of compensation—its jaws being both small and weak, and it had neither claws nor a long tail for defence; but the great serpent is supposed to have both the first and last of these organs to perfection. Whenever the sea serpent is taken, a feat which will ultimately be accomplished, it would be curious if an anatomical examination should prove that Prof. Agassiz actually predicted the true plan of its construction.

PART IV.

FOREIGN SUMMARY.

19. *Typhus and Enteric Fever.*—In an article in the *Monthly Journal, Edinburgh*, Dr. RITCHIE points out certain distinctions between "Enteric Fever and Typhus." In other words, (we presume he means) the distinctions between *Typhus* and *Typhoid* fevers; a distinction which British physicians are very slow in making. With the speculations of Dr. Ritchie about the cause of "Enteric" fever we have no concern; but it is gratifying to perceive, that these two forms of fever are fully recognized in Great Britain; the one spending its force, mainly, on the nervous system, and the other, mainly, on the intestinal glands. The following are the author's general views in regard to treatment:

"In typhus the general indication is to nurse the vital powers. This is done, 1st, during the formative stage, by early confinement to bed, and by a light cordial regimen; 2d, in the tumultuary or irritative stage, by such means as are fitted to moderate the nervous excitement, and increased vascular action, such as the gentlest laxatives, small doses of opium mixed with ipecacuan, tartrate of antimony, or acetate of ammonia, tepid sponging of the general surface, cold to the head, tepid or warm foot-baths, mild or cooling drinks, and farinaceous food. 3rd, In the stage of subsidence or collapse, by sustaining the heart's action, in proportion as it fails, with wine internally, and with the carefully maintained use externally, of warm fomentations to the trunk and limbs, aided in bad cases by ardent spirit added to the wine, and by more or less mustard to the fomentations. 4th, In the stage of complication, or of consecutive local disease, by modifications in the treatment now described, and by the addition of other appliances, according to the organ affected, the severity of the lesion, and the state of the strength.

"In enteric fever, again, the chief indication is to destroy the inflammatory action in the follicles of the intestines, and

in the lungs, when it exists there, consistently with a due regard to the irritation of the cerebro-spinal axis, and the loss of fibrine, and of red globules by the blood, which distinguish this disease from simple inflammation. This is to be done, 1st, by restoring the circulation and secretion of the skin by the warm bath, and a flannel under dress; 2d, by detraction of blood by cupping or leeches from the abdomen or loins; 3rd, by blisters, and afterwards constant warm fomentations to the abdomen; 4th, by the steady use of opium, united with ipecacuan, borax, and chalk, with or without catechu, and in doses proportioned to the severity of the diarrhœa, or, where this symptom resists these means, and the bronchitis is not acute, by the addition to the opium of acetate of lead; 5th, by a strictly farinaceous or a milk diet; 6th, besides these modes of fulfilling the indication mentioned, it is necessary to support the strength, in advanced stages, to the extent that the bronchitis does not prevent, by the use of small quantities of wine. Pneumonia is to be met by mercurial frictions externally, and by the hydrargyrum c. creta internally; and hæmorrhage from the bowels, by super-acetate of lead, and renewed blisters to the abdomen; or, when the fever of pneumonia forbids the employment of the acetate of lead, by the use of turpentine."

---

20. *Chomel's distinctive characters of Measles and Scarlatina.*—When the eruption in scarlatina is *punctated* instead of a uniform blush, its distinction from measles is difficult. However, when *punctated*, the spots are equal, uniform, symmetrical, and their *color* is every where the same; and the same is true of the minute vericles, when present. On the contrary, the puncta of measles are diversified in color, shape and size. Small miliary tubercles are also frequently seen in scarlatina—seldom in measles.

---

21. *Coffee in Neuralgia.*—M. Piorry has cured a neuralgic affection of the frontal branch of the fifth pair, by the use of a strong decoction of coffee. The case had resisted other remedies. Another similar cure has been reported.

---

22. *Carbonic acid in Epidemic Cholera.*—The views published by Dr. Parkin, in relation to the curative effects of carbonic acid in cholera, have been confirmed by a commission of the *Royal Academy of Medicine and Surgery, of Barcelona.* The carbonic acid is administered simply by

employing the ordinary effervescing mixtures, which should be swallowed before the gas escapes. The effects are described as truly wonderful in every stage of cholera—diarrhœa, rice water purging, and collapse, but *especially in the commencement of the latter.*

---

23. *Treatment of Aphonia.*—In a case of aphonia, of five months duration, resulting from catarrh, the inhalation of iodine proved successful after all other remedies had failed. It was inhaled from a wolf's bottle, for fifteen minutes twice a day. Quinine and iodine were given internally at the same time.

---

24. *Simple means of arresting Epistaxis.*—In cases of profuse hemorrhage from the nose, Dr. Oke introduces the little finger, and presses upon its base and sides until the bleeding stops. A small dossil of lint, made wet with cold water and rolled in powdered alum, may then be introduced, and pressed upon the same point.

---

25. *Means of arresting hemorrhage from Leech bites.*—Whenever a leech bite bleeds profusely, and compression cannot be made, as over the neck, abdomen, &c., I wipe the cut quickly with a bit of lint, or fine linen, and while it is comparatively dry, seize a small portion of the integuments surrounding the bite with the finger and thumb of one hand, and between them continue to make a moderate, but not painful, pressure. If the child be restless and struggle, I loose the hold, but instantly dry and seize the cut as before.—*M. Hall.*

---

26. *Treatment of Caries of the Teeth.*—Dr. Orpen states that caries of the teeth may thus be arrested: scrape out the softened carious part of the tooth, and rub the cavity with a saturated solution of nitrate of silver, or the solid nitrate merely moistened. This effectually arrests caries without plugging. He suggests to dentists the propriety of the same application, before filling teeth.

---

27. *Treatment of Hydrocele.*—Dr. Alfred A. Harvey, of Bristol, has for thirty years successfully employed the following treatment in hydrocele, obtaining a radical cure without injection. His mode of treatment is as follows:—First, discharge the fluid with a trocar, or pocket lancet, and then apply a warm vinegar poultice all over the scrotum, in order to bring on inflammation, which generally takes place in a few

hours, and becomes painful. When sufficient inflammation has been excited, remove the vinegar poultice, and apply a bread and milk poultice; in a short time the pain and inflammation generally subside, and the cure is completed. Give a few smart doses of purgative medicine.

28. *Cold Hip-bath in Irregular Menstruation.*—Dr. Chmelik speaks favorably of this remedy. He commenced first with the tepid, and then with the cold bath, twice daily, morning and evening, continued for half an hour each time. Generally after the use of the bath for eight days, the patient perceived a feeling of heat in the hypogastric region, and a dragging sensation in one or both inguinal regions; sometimes slight diarrhœa supervened, and in one case where menstruation had been suppressed for a year and a half, considerable swelling and inflammation of the external genitals came on. In all cases after the bath had been in use for four or five weeks, menstruation returned without the employment of any other remedial measures, and in most of the cases the catamenia had been suppressed for half a year or longer.

29. *Remedy for Toothache.*—Sulphuric æther, saturated in the cold with camphor, and then a few drops of liq. ammoniæ added. It acts as a cautery. M. Cottereau, who has employed it for four years, says it is always attended with success. The rapid evaporation of the æther causes a slight deposit of camphor in the dental cavity, and this protects the nerve from the air. The ammonia cauterizes.

30. *Civiale's Results of Lithotrity.*—From 1836 to 1845, I have employed my method two hundred and sixty-six times, and have obtained two hundred and fifty-nine cures, some of which were incomplete. This result is the more remarkable from the fact that most of the subjects were aged. There were only five children. Among those operated on, were five physicians or surgeons. Seventy-nine other calculous patients applied for relief, but I did not think them in a favorable condition for lithotrity. Twenty-eight have submitted to the operation of lithotomy; seventeen of whom have been cured. The others retained their stones, and most of them afterwards fell victims either to the progress or complications of the disease.

It will be seen from the above statement, that a considerable number of calculous patients are unfit for Lithotrity.

Civiale himself estimates the proportion at *one fourth*; formerly he regarded it as one half. Of Lithotomy cases, he lost eleven out of twenty-eight—more than one third. His whole number of Lithotrity has been 582!

---

31. *Urine in Ascites.*—In acites, dependent on disease of the liver, the urine is always more or less deeply colored; while in renal ascites (Bright's disease or otherwise) the urine is white or colorless.—*Rayer.*

---

32. *Treatment of Neuralgia.*—By Dr. Hermel.—The numerous cases observed by M. Hermel have led him to the following conclusions:

1. There are essential or idiopathic neuralgias which affect the intermittent or remittent type. These neuralgias are treated with success by quinine and its preparations.

2. There are neuralgias which appear with a febrile action, and either follow rigors or flushings of heat, and which are analogous to one of the stages of intermittent fever. These, like the preceding, are also cured by the employment of the antiperiodic specific.

3. There are diseases which present a greater or less number of different affections during their course. Such are gout and scrofula. When one of these sympathetic affections has just disappeared, such, for example, as hæmorrhoids, and neuralgia appears, the best, and indeed the only method of curing it, even if it have the intermittent type, is to re-establish the affection by which it was preceded. These neuralgias do not require quinine.

4. In neuralgias with an intermittent type, which are symptomatic of a disease or an affection which does not present this type, quinine and its preparations may be employed, as an accessory, to combat the intermittent nervous pain if it persists.

---

33. *The action of the Acetate of Morphia on Children.*—(*Am. Jour. Med. Sci.*)—Dr. Melion believes, from the results of his experience, that the acetate of morphia possesses more powerful anodyne and antispasmodic properties in children than opium. He divides its effects, when internally administered, into three degrees. 1st. All the secretions and excretions of the internal organs become diminished, but the cutaneous exhalation becomes increased; hence the skin becomes moist, and a copious perspiration covers the head and upper

parts of the body; but before this effect takes place it shows its influence on the nervous system, and pain and convulsions cease; its influence lasts from three to six hours, the children then pass a quantity of pale urine, and cutaneous transpiration becomes normal.

2d. The nervous system is the first part affected. The child becomes dull, drowsy, and gradually falls into a state of stupor; it lies with the eyes shut or half open, one more so than the other; the ball of the eye may be either fixed or may roll; the pupil is contracted and inactive; the heat of the head is increased, and the scalp and face are covered with copious perspiration; the child murmurs or speaks during its sleep, and moves its upper lip and lower jaw as in the act of sucking; if it awakens from sleep, it desires to drink, and again falls asleep. This state may last for eight or twelve hours.

In the 3d degree, venous congestion shows itself over the whole body, the child lies listless, the skin is purple, the temperature diminished, the pupils contracted and inactive, the cardiac pulsations weak, the respiration slow, the pulse quick, or slow, small, and weak, and all secretions and excretions suppressed. If this state is not quickly removed, convulsions and death ensue.

Dr. M. employed the acetate with great benefit. 1st. In intestinal catarrh, in the chronic diarrhœa of scrofulous children, and in the profuse debilitating diarrhœa of dentition. 2dly. In convulsions arising from the irritation of dentition or worms. And 3dly. In hooping-cough. As it causes drowsiness and stupor, and other nervous symptoms, even in small doses, he considers it contra-indicated in all cerebral or meningeal affections.—*Monthly Journ. Med. Sci.*, Dec. 1848, from *Med. Wurtemberg Correspondenzblatt.*

PART V.

NOTICES OF EMPIRICISM.

1. *Honesty of an Empiric.*—A correspondent from *Cynthiana, O.*, writes as follows: "Empiricism is, I am happy to say, on the decline, although we have a few of the disciples of Thomson, Jewitt & Co. among us; a few years ago they did nearly all the practice. There is a *Water Doctor* located at Sinking Springs, eight miles south of this place, who enjoys quite a reputation as a cure-all for chronic and obscure diseases. And that, too, after having confessed to a regular physician, that he only tacked on the 'piss humbug' to gull the people. This confession has been made public, but the organ of gullibility is so large in the heads of some people, that his reputation has not decreased in consequence of it."

2. *Empiricism in Illinois.*—A correspondent from Eldridge writes thus: "As to *quacks* we have plenty of them. There are between twelve and fifteen men in Edgar county, styled Doctors, and with the exception of a few they never saw a medical institution. Our statute don't know a physician! Any thing is allowed to practice physic here 'in all its various branches;' all that is required is impudence, self esteem, *and low bills!!*"

3. *A Clairvoyant Doctoress.*—Dr. SABINE read to the N. Y. Pathological Society, his notes of the examination of the body of young Mr. Oatman, whose case was recently the subject of a coroner's inquest, he having been under the treatment of a clairvoyant in this city named Johnson. He was 22 years old, and had been considered by her as affected with ulcers of the stomach, which, it is said, she had promised to cure, and for which she had been giving him McMunn's Elixir of Opium. Dr. S. was told that Mrs. J. would not allow the patient to be visited by any regular physician, lest it should occasion fatal hæmorrhage from the ulcers of the stomach. He had presented all the rational signs of Phthisis. On post-

mortem examination, both lungs were found so loaded with tubercular matter as entirely to prevent their collapsing. One very large, and numerous smaller vomicæ existed throughout their substance. *The stomach was perfectly healthy*—a few tuberculous ulcers in the intestines.

It appears that when it was discovered that Mrs. J. had erred in her Diagnosis and Prognosis, she was again "spiritualized" by the person connected with her in business, and made in that state the following statement, many points of which are, however, denied in toto by the friends and family of the deceased.

"When I first looked at him his lungs were in a dreadful state, all ulcerated, and his stomach, too. R., and old Mr. O. were present; no one else. I have never said, at any time, he would get well, but stated, that if his strength held out, I might possibly help him. His Liver was in a very bad state, and his Lungs were so tender, that if he did die, they would all drop in pieces.

2d Examination.—The same three were present. He said he was better, but I told him it was not any permanent change. The 3d time I went up there, a good many present; I said he looked a little more favorable; that the ulcers began to break, but there was a great deal more to be done yet, and if his strength held out there might be some chance.

5th Examination.—I found there was but little chance for him, as the ulcers in his stomach, and lower part of his lungs were breaking, and I found from matter running from them, that he was sinking under it. The last time (Tuesday,) I knew I would not raise him, as he was sinking under it; that what was done, must be done right away; that there would be a change which I knew would be for the worse—they might have thought for the better, but I did not say so; for I knew no medicine would save him, as I saw his constitution was giving way. He took the Hadlock Medicine about a fortnight ago, which operated very powerfully on his bowels for 24 hours, and was never so well after. I always said his lungs were diseased; I did say he would die with consumption of the stomach, and he did die with it; that was his original difficulty. The difficulty of the stomach *rotted* his lungs. If they say his stomach was healthy, it is not so. Why, his stomach has been a perfect mass, but was healed over. His father told me he passed scabs in his chamber, and I should like to know where they came from, if not from his stomach. His lungs rotted and fell to pieces. I have known them to

BOSTON MEDICAL LIBRARY AUG 21 40

rot in 24 hours. It does seem to me, that any Doctor might know that he would not have such matter through his bowels from the lungs. I never told them that his lungs were healthy. I knew they were not. They should be ashamed to say his stomach was not diseased, when he was constantly passing such matter through the bowels."—*N. Y. Annalist.*

---

4. *A New Doctor.*—(*Ibid.*)—I understand that Homœopathy has a formidable rival in the affections and confidence of the "upper ten," in the "celebrated" Mekorka, who has recently settled in Bleecker street. He has, as I have been informed, a large number of testimonials of his wonderful skill, signed by many "counsellors of State," priests, and medicine-men, as well as by all the Miss Martineaus, the Sir E. L. Bulwers, etc., etc., of the great Osage nation. He "*confines*" himself to general practice, and to a long list of "*specialities*"—in other words, he is "up to any thing," and cures all things. His Osage mesmerism, is said to be particularly "fine," and as a clairvoyant, he is unapproachable by the "pale-faced" professors; for, although they can see *through* every thing, he can see a little *beyond*. Which school, the German or the Osage, will finally secure the confidence of the *elite*, is very doubtful; for my own part, I should find it extremely difficult to decide for either, to the prejudice of the other; for, although I hold in high esteem "the *learning* of the Egyptians," still, as a patriotic American citizen, my sympathies strongly incline me toward the home production.

New York, March, 1847. [*Moore Hoit.*

---

5. *Uroscopian Practice.*—One of these German doctors located himself near a small watering place, where the "multitude of impotent folk, of blind, halt and withered," were accustomed to congregate, and who after two or three years' practice, is reported to have carried off the handsome little sum of $12,000! He never occupied more than about three minutes, and usually much less time, in the examination, used no tests, but simply shook the vial and *looked* at its contents. One of his famous remedies was the "*froth of the sea,*" which proved to be simply a solution of Epsom salts. The following is a case of his diagnosis. The patient had an attack of inflammation of one ear, from which he was recovering, but was troubled with acidity and flatulence of the stomach. The "doctor" being in the vicinity, was invited by some *officious* person to see him. A few days after, the patient put

up his "two-ounce vial" for examination. The following description of the case was returned. "You have *cold inflammation* of the stomach, and *slimy adhesions* of the abdomen." The wife of the patient, as it was afterwards discovered, who enjoys good health, but who was about three months *enceinte*, had emptied the vial privately and filled it with her own urine. The following is another of his descriptions, which we copy *verbatim et literatim.* "You are afflicted with a Weakly Dijestion of the Stomach—and Stopages of the absorbants and a torpid State of the liver—affect of the Nerves—weakness of the back Palpitating of the Heart Pressure of the Brest and lungs—and a Stopage of Pancreas." The patient enjoys pretty good health; her only complaint is chronic catarrh.—*Boston Med. & Surg. Jour.*

---

6. *Dental Advertisements.*—The following remarks from *Stockton's Dental Intelligencer*, are just and appropriate, and are as fully applicable to the *Medical* as the Dental profession:

To unblushingly and egotistically set forth, in a public newspaper, or card, one's professional qualifications,—his "constantly increasing practice for a long number of years,"—"his unbounded ability from years of experience,—"his facilities for rendering dental aid permit him to offer his services at half price of all other operators,"—or, a long list of references to Revs., Cols., Honors., and Post Masters, all of whom are generally necessarily ignorant of what constitutes an accomplished practitioner in the profession,—or advertise themselves in possession of a wonderful secret that makes it for the advantage of the public to pay *their* office a visit;—is conduct which is base, dishonorable, unmanly, and unprofessional in the extreme.

Let the well educated practitioner avoid all such. Let him rely upon his merits, and "like bread cast upon the waters," he will not wait long for a return. Let it be said of him as of Fabricius of old, "it would be easier to turn the sun from his course than him from the paths of honor."

PART VI.

EDITORIAL DEPARTMENT.

Inhalation of Sulphuric Ether.—The inhalation of sulphuric ether for the purpose of securing its lethean effects during surgical operations, has rapidly extended throughout Europe and America, and has engaged the attention of a large number of the most celebrated surgeons. It is employed at this time, not only in almost every city and village in the United States, but it has likewise been introduced into the principal cities of Europe. Many of the most noted surgeons of London, Edinburgh, Dublin, Paris, Vienna, etc., have employed it during surgical operations; and the results, according to the reports in the journals, have been most satisfactory. All of the most important and painful operations have been performed—amputations, hernia, extirpations of scirrhus breasts, extirpations of the eye, ocular tenotomy, evulsion of the toe nail, Cæsarian section, difficult delivery, together with almost every variety of operation, have been equally satisfactory in their results. And, as the story goes, *criminals* are now pleading for the somnific influence of ether to alleviate the terrors and pain of the guillotine and the halter!

In the meantime, the more cautious and prudent have looked with some degree of apprehension to the results, but thus far no serious accident has been reported; and when we contemplate the thousands of instances in which the agent has been employed, and that too in many cases by Dentists and others who can claim but a very limited acquaintance with physiological and pathological laws, it must be confessed that the results are truly astonishing. But notwithstanding these important facts and astounding results, it would still be premature and unphilosophical to assume that, because no serious accidents have thus far occurred, an equal immunity can be claimed indefinitely for the future; on the contrary, it may still be held as a doubt, and that too without

incurring the charge of unreasonable incredulity, whether disastrous consequences, in some instances, may not yet be placed upon record, as one of the incidents in the history of this widespread and almost indiscriminately applied agent. But what if such should be the result—if one in ten thousand, nay, even the one thousandth fall victims to this practice? What then? Would the profession be required to abandon the use of an article because of such mortality? If a rule so stringent be adopted, what will become of blood-letting, of tartar emetic, of opium, of quinine, and, in truth, of every active remedy which we employ. It requires no oracle to solve such a question.

The plain truth then is, that so far as any *immediate* danger is to be apprehended from the inhalation of ether, it may safely be classed with our ordinary active agents employed in the treatment of diseases; and, therefore, no reasonable objection can be urged upon that ground.

But another consideration of a more grave character presents itself, and one to which we have seen no allusion. We refer now to the hypothetical but not improbable *secondary* results which may follow the inhalation of ether. To settle this question in any thing like a definite or satisfactory manner, will require many facts and much careful observation; still it is a point of such vast importance, and one to which every important feature of the subject relates, that it merits the close scrutiny of every surgeon. In plain terms we mean this—Are surgical operations, performed while the subject is under the influence of ether, equally successful with others in which that agent has not been employed? Does it produce any *secondary* consequences, by acting on the elements of the blood and the functions of the nervous system, which impair the healthy actions to an extent which may jeopardize the recovery of the patient. These are important questions, but are not easily answered. That morbid results may follow the inhalation of ether, is highly probable; still it has not been demonstrated in a manner which will fully apply to the present subject; but there are a few facts which bear upon the point at issue, and deserve to be noticed.

It will be remembered that, according to the experiments of M. Magendie, ether produced a species of intoxication and a tendency to sleep; but its most remarkable effect was to dissolve

the blood-corpuscles, but it did not prevent coagulation. This fact is important as far as it goes, for it proves that ether is capable, even in a diluted state, of modifying the elements of the blood; and if the blood is thus changed in any of its properties, it follows as a necessary consequence, that the nervous and other functions may be seriously impaired. It is true, the introduction of gases through the medium of the lungs, are less injurious, certainly less rapidly pernicious, than when injected into the veins; but still it is well known that substances inhaled do produce morbid effects, when sufficiently concentrated and in appropriate quantities. What, then, might we fairly anticipate from the introduction of a *large quantity* of ether into the system and commingled with the whole mass of the blood? Certainly we may expect *some* sort of effects beyond the slight action upon the nervous system. It must be admitted that the quantity ordinarily introduced is not small, for the patient usually inhales it for some minutes, during which time a sufficient amount will gain admission into the blood to become intermingled with its entire mass. It can hardly be supposed, that an article of such activity, and one known to produce a powerful and specific effect upon the blood, can remain in the system for some time, in large quantities, without producing some important effects.

But independently of any specific action of ether on the elements of blood, there is an other and less equivocal condition which merits attention; we refer to the partial *asphyxia* produced. In this condition, the deprivation of oxygen, and the imperfect elimination of carbonic acid gas, will produce a highly morbid state of the system; a condition in which the carbonaceous element reacts upon the cerebro-spinal axis, and probably conduces to the insensibility. But to say the least, a partially asphyxiated state of the system is added to the specific effects of the ether; and the two combined, it is reasonable to infer, exert an influence which may become more than temporary.

The question then for solution, is, whether the immediate effects, and the secondary consequences of the inhalation of ether, may not be more prejudicial, than the effects of pain during a surgical operation. There is this difference in the two cases: the effects of pain are mechanical, and are confined to a depressing influence on the nervous system,—a *shock*; while in the other

case, the ether produces a *morbid* or *poisonous* influence, and probably more or less chemical action. And in tracing out the same question, the idea very naturally occurs, whether the simple depression of the nervous function consequent upon the pain of a surgical operation, could not be more directly and certainly remedied, than the effects of a poison. The one requires, as a general remark, nothing more than stimulants to sustain the system; while the poisonous and chemical effects of the other would require we know not what, and would probably receive nothing. It should be borne in mind, that the object in employing ether is not merely to avoid the temporary pain incident to a severe surgical operation; but it is rather to obviate the *secondary* results—the *shock* which follows extensive and painful operations. If, therefore, it should be finally ascertained, that recoveries were more tedious, or less certain, when ether had been inhaled, its continued use would not be justified upon the less important consideration of allaying pain.

The whole subject, it appears to us, is open for investigation; and until something more definite is known, the questions to which we have referred must remain at least as plausible objections. It is not asserted that the morbid effects suggested really do occur, but they are adverted to as events by no means improbable; on the contrary it may be asserted, that the effects of ether are sanative; and it must be confessed it could not be disproved, however improbable such an assertion may appear.

In view of these uncertainties, it becomes the duty of surgeons to investigate the subject; and the only method by which this can be accomplished is *statistical observations*. Let those who have charge of large hospitals, or who may be in extensive surgical practice, compare the results of operations which have been performed without the aid of ether, with an equal number of similar cases in which that agent was employed. This will be laborious and difficult to accomplish, but it is not an impossibility; and at all events, until such statistical observations can be obtained, the whole subject must remain uncertain; and until such uncertainty is removed, it may be, for aught we know to the contrary, that those whose duty and object it is to relieve suffering humanity, are contributing to augment the very mortality they are seeking to avert.

Medical Schools in the United States.—The following list of Medical Schools in the United States, was arranged by Dr. JAS. COUPER, of New Castle, Delaware, chairman of the committee appointed by the last National Medical Convention, to report on Medical Schools. It was first published in the *Am. Jour. Med. Sci.* We have re-arranged the list so that the schools appear in succession, according to their respective ages. Several have the same date.

MEDICAL SCHOOLS.	Location.	When founded.
1. Medical Department of the University of Pennsylvania,	Philadelphia, Pa.	1765
2. Massachusetts Medical College, (Harvard,)	Boston, Mass.	1782
3. New Hampshire Medical School,	Hanover, N. H.	1797
4. University of the State of New York, (College of Phys. & Surg.)	New York City,	1807
5. Faculty of Physic of the University of Maryland,	Baltimore, Md.	1807
6. Medical Institution of Yale College,	New Haven, Conn.	1810
7. Medical Department of Transylvania University,	Lexington, Ky.	1818
8. Castleton Medical College,	Castleton, Vt.	1818
9. Medical College of Ohio,	Cincinnati, O.	1819
10. Medical School of Maine,	Brunswick, Maine.	1820
11. Berkshire Medical Institution,	Pittsfield, Mass.	1823
12. Jefferson Medical College,	Philadelphia, Pa.	1824
13. Medical Department of Columbian College,	Washington, D. C.	1825
14. Medical School of the University of Virginia,	Charlottesville, Va.	1825
15. Washington Medical College,	Baltimore, Md.	1827
16. Medical College of Georgia,	Augusta, Ga.	1830
17. Medical College of the State of South Carolina,	Charleston, S. C.	1833
18. Medical Department of Willoughby University,	Columbus, O.	1834
19. Vermont Medical College,	Woodstock, Vt.	1835
20. Medical College of Louisiana,	New Orleans, La.	1835
21. Medical Department of St. Louis University,	St. Louis, Mo.	1836
22. Medical Department of the University of Louisville,	Louisville, Ky.	1837
23. University of the City of N. York,	New York City.	1837
24. Medical Department of Hampden Sydney College,	Richmond, Va.	1838

Medical Schools.	Location.	When founded.
25. Albany Medical College,	Albany, N. Y.	1839
26. Medical Department of Pennsylvania College.	Philadelphia, Pa.	1839
27. Medical Department of the University of Missouri,	St. Louis, Mo.	1841
28. Rush Medical College,	Chicago, Ill.	1843
29. Western Reserve Medical College,	Cleveland, O.	1844
30. Franklin Medical College of Philadelphia,	Philadelphia, Pa.	1846
31. Buffalo Medical College,	Buffalo, N. Y.	1846
32. Memphis Medical College,	Memphis, Tenn.	1846
33. Philadelphia Medical College,	Philadelphia, Pa.	1847
34. Medical Department of Geneva College,	Geneva, N. Y.	
35. Winchester Medical College of Virginia,	Winchester, Va.	
36. Medical Department of Illinois College,	Jacksonville, Ill.	
37. Indiana Medical College,	La Porte, Indiana.	

Our Sixth Volume.—It will be perceived that the Library Department of the Lancet is unoccupied for the present number. This arises from our inability to obtain the work which it is intended to re-publish, in time for the May number. We have in course of translation, the treatise of *Andry on Diseases of the Heart*; and a part of it will be in readiness for the next number, and the whole completed within the present volume.

We would respectfully solicit the aid of the friends of the Lancet in extending its circulation. Those who desire to see it prosper, can render very efficient service by procuring subscribers; there is scarcely one, indeed, who could not obtain one or more subscribers. The terms of the Lancet are very favorable, and certainly offer some inducements to subscribe.

The *Original Department* of the Lancet, will contain many valuable papers, from the Professors of Transylvania and others; the *Bibliographical Department* will contain notices of most of the new publications; the *American Summary* will contain a more extensive notice of the American journals than is to be found in any other journal; while the *Foreign Department* will embrace extensive notices of foreign intelligence; the *Notices of Empiricism* will be a *mirror* in which empirics may contemplate their

features; the whole, it is hoped, of such a *practical* character as to prove useful to practitioners.

We have received several complaints that some of the numbers of the Lancet failed to reach the subscribers. This we regret, and will certainly use every precaution to avoid similar failures. The work is carefully enveloped in strong wrappers, and regularly mailed. The failures must be owing to irregularities of the mails. We would request those who desire to discontinue the present volume, to give immediate notice.

The American Journal of Homœopathy.—We have received an exchange copy of the above Journal, which is published in New York and edited by Drs. Kirby & Snow. The American Journal is no doubt a very fair representative of that German transcendental moonshine philosophy,—that subtle system of sublimated mental abstractions and dynamic nonsense, which has been consecrated, under the cognomen of Homœopathy, to the credulity of human nature. If there is any one collection or classification of errors in this odd world of ours, either in the natural or moral sciences, which can claim entire exemption from every thing that bears the most remote resemblance to the rational and true,—a system devoid of even one straggling ray of reason—that system is unequivocally Homœopathy. It has always appeared to us more like a refined sort of insanity, than the simple errors deduced from false premises.

The Journal which has elicited these remarks is doubtless equal to any of its kind: and so long as the editors confine themselves strictly to their system, and do not forsake the Ideality of Homœopathy for the more tangible philosophy of true science, we are willing to look into their journal and read their lucubrations; but should they desert that system, and attempt to mix it up with ours, as most of the Homœopaths do in this region, we would then regard the system as having *dishonesty* added to *error*, and consequently too vile to read even for amusement.

Resignation and Appointments in Boston.—Dr. John C. Warren, Professor of Anatomy and Surgery in Harvard University, has resigned the position which he has so creditably filled for many years.

The following appointments have been made in the same school: Oliver W. Holmes, M. D., Professor of Anatomy and Physiology; John B. S. Jackson, M. D., Professor of Pathological Anatomy.

Buffalo Medical College.—We are gratified to learn that the prospects of this new school are decidedly good. The Faculty have nobly determined to enforce rigidly the cash system. This is a bold stand for a new school; but it is one which shows that the Faculty are above the degrading practice of resorting to the credit system for the ignoble purpose of swelling their list of pupils. The measure deserves the commendation of the profession, and will doubtless receive its merited reward.

Professor Frank. H. Hamilton's Notes of a Medical Tour.—During the past year, numerous communications have appeared in the *Buffalo Medical Journal*, giving vivid and highly interesting sketches of a recent European tour, by Prof. HAMILTON. We are not less amazed at the rapidity of travelling—the *forced marches* made by Prof. H.—than we are pleased with the readiness and vivacity with which he sketches in his "Notes," an outline of these excursions. We hope it may have occurred to Prof. Hamilton to have extra copies of these "Notes" struck off, so that they may appear in a regular and connected form; but if he has not exercised this foresight, it is to be regretted, for his sketches would have made an instructive and *valuable* little volume. These notes alone are well worth the subscription price of the Buffalo Journal, and it is probable they could be obtained by ordering the back numbers.

Dr. J. Lawrence Smith.—We learn from the South. Jour. Med. & Phar., that Dr. J. LAWRENCE SMITH, one of the former editors of that Journal, has, since his arrival in Constantinople, been appointed Geologist and Inspector of Mines to the Sultan of the Ottoman Empire.

The Southern Journal of Medicine and Pharmacy.—In consequence of the removal of Dr. SMITH, and the death of Dr. SINKLER, former editors of this Journal, the Editorship of this excellent periodical has devolved on P. O. GAILLARD, M. D., and H. W. DE SAUSSURE, M. D.

CONTENTS OF WESTERN LANCET.

FOR JUNE AND JULY, 1847.

PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—Procidentia Uteri: an Inaugural Dissertation submitted to the examination of the Trustees and Medical Faculty of Transylvania University, for the Degree of Doctor of Medicine, on the 20th of January, 1847. By JOHN NASH LEGRAND, of Warren county, Mississippi. - - - - - - 61

ART. II.—Remarks on a peculiar Epidemic Fever of Miami county, Ohio. By G. VOLNEY DORSEY, M. D., of Piqua, Ohio. - 76

ART. III.—Open Scirrhus of the Cardiac Orifice—Cure. By B. RUSH MITCHELL, M. D., U. S. Navy. - - - 82

ART. IV.—The importance of Obscure Symptoms, in forming a diagnosis in obscure cases; illustrated by a case of circumscribed disease. By G. SPRAGUE, M. D., Kalamazoo, Michigan. - - - 85

PART II.

REVIEWS AND NOTICES.

ART. V.—Address to the Graduates of Geneva Medical College. By C. ALFRED LEE, M. D., Professor of General Pathology and Materia Medica in Geneva Medical College. 1847. pp. 23. - - 89

ART. VI.—New Elements of Operative Surgery. By ALF. A. L. M. VELPEAU. Translated by P. S. TOWNSEND, M. D., late Physician to the Seaman's Retreat, Staten Island, New York. Under the supervision of, and with notes and observations, by VALENTINE MOTT, M. D., Professor, etc. In three volumes. Vol. III., with an Atlas. New York: S. S. & W. Wood. 1847. pp. 1162. - - - 95

ART. VII.—Hand-book of Human Anatomy, General, Special, and Topographical. Translated from the German of Dr. VON BEHR, and adapted to the use of the English Student, by JOHN BIRKETT, Fellow of the Royal College of Surgeons of England, and Demonstrator of Anatomy at Guy's Hospital. Philadelphia: Lindsay & Blakiston. 1847. pp. 487 - - - - - - 96

ART. VIII.—A treatise on the Diseases of the Eye. By WM. LAWRENCE, F. R. S., etc. New Edition. Edited, with numerous additions, and one hundred and seventy-six illustrations, by ISAAC HAYS, M. D., Surgeon to Wills' Hospital, etc. Philadelphia: Lea & Blanchard. 1847. pp. 859. - - - - - - 97

PART III.

AMERICAN SUMMARY.

1. Employment of Ice in the Treatment of Dysentery. - - - 98
2. Cold Water in Over Doses of Opium - - - - - - 98
3. Medical Biographies. - - - - - - - - - - 98

4. Spina Bifida Cured by Excision - - - - - - - - 99
5. Strychnine in Chronic Bronchitis. - - - - - - - 93
6. Bifid Vagina. - - - - - - - - - - - 100
7. Obliteration of the Vagina. - - - - - - - - - 100
8. Hydrophobia, post mortem appearances. - - - - - 100
9. Extraction of Urinary Calculus from the Female. - - - 101
10. Regulations in the Indiana Medical College. - - - 101
11. Paregoric and Port Wine and Consumption. - - - - 101
12. Surgical Case at Monterey. - - - - - - - - 102
13. Gun-shot Wound. - - - - - - - - - - 102
14. Amputations at Monterey. - - - - - - - - - 103
15. Wound of the Lung. - - - - - - - - - - 104
16. Gun-shot Wound. - - - - - - - - - - 105
17. Discoveries in 1846. - - - - - - - - - - 105

PART IV.

FOREIGN SUMMARY.

18. Treatment of Rheumatic Inflammation of the Eye. - - 109
19. Young Physic. - - - - - - - - - - 107
20. Arteritis. - - - - - - - - - - 107
21. Inhalation of Ether. - - - - - - - - 108
22. Inhalation of Muriatic Ether. - - - - - - 108
23. Exhibition of Assafœtida during Pregnancy. - - - 108
24. The Physiological Effects of Sulphuric Ether, administered by friction on the mouth and fauces. - - - - - - 108
25. Inhalation of Ether. - - - - - - - 109
26. Fatal Effects of Ether. - - - - - - - 109
27. Fatal Effects of Ether in a case of Lithotomy. - - - 110
28. Effects of Ether. - - - - - - - - 111
29. Effects of Ether in Parturition. - - - - - - 112
30. Observations on the condition of Asphyxia, or Insensibility, induced by the inhalation of Ether. - - - - - - 113
21. On the Cure of Phthisis by exercise of the Lungs and by Fattening 116
32. Clinical Statistics of the Learned Profession. - - - 117

PART V.

NOTICES OF EMPIRICISM.

1. Advertisements of Secret Remedies and Empirical Associations - 118

PART VI.

EDITORIAL DEPARTMENT.

The National Medical Convention. - - - - - - 118
Domestic Correspondence. - - - - - 129, 130, 131
A Place without Doctors. - - - - - - - 132
Ship Fever. - - - - - - - - - 132
Obituary Record. - - - - - - - - 132

LIBRARY DEPARTMENT.

ANDREY ON THE HEART—Twenty-four pages.

THE WESTERN LANCET.

VOL. VI. LEXINGTON, JULY, 1847. NO. II.

PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—*Procidentia Uteri: an Inaugural Dissertation submitted to the examination of the Trustees and Medical Faculty of Transylvania University, for the Degree of Doctor of Medicine, on the 20th of January*, 1847. By JOHN NASH LEGRAND, of Warren county, Mississippi. *

Displacements of the Uterus have been known to the medical profession since the days of Hippocrates: they result from mechanical violence, disease of the ligaments sustaining the uterus, disease of the uterus itself, or from constitutional derangement. They are rarely, if ever, primary affections, but are the sequences of other diseased actions; derangements of the chylopoietic organs, the skin, and nervous system are almost invariably their source.

When they result from mechanical violence, the cause is apparent and the kind and degree of suffering may be readily anticipated. When they result from the disease of the uterus itself, or its ligaments, the character of the suffering will be in accordance with the disease of the organ. When they exist as sequences of disease of the general system, the character of the suffering induced, will be as variable as the primary affections.

* DOCTOR LAWSON:

My Dear Sir—Learning from you, that you design doing me the honor of publishing my Inaugural Thesis in the Lancet, and presuming that you will not publish the dedication, to Professor Dudley, justice to that great man, as well as to myself, requires me to say, that many of my practical views have been derived from him; and that the mode of exercising the patient, while she is confined to the floor, is entirely his.

Yours respectfully, JOHN NASH LEGRAND.

Although they are not primary affections, there is no class of diseases capable of producing a greater variety of protracted suffering, and none have more perfectly enlisted the sympathies, and baffled the skill of medical men.

Notwithstanding the amount of talent, industry, research, and patient investigation, that have been put in requisition, they remain the opprobria of the medical profession. All the authors, who have published the results of their investigations, have signally failed to teach us how to cure them; whether this failure be one of the unavoidable results of the primeval curse, or whether it has arisen from radical misconception of the nature of the disease, the mortifying fact of our inability to cure still exists.

The healthy unimpregnated uterus is situated nearly in the centre of the pelvic cavity, its os being about four inches from the os externum; from this position it may be removed to any conceivable degree.

Mr. Ashwell, who is one of the best writers on the diseases of females, speaks of hysteroptosis or prolapsion, anti and retroversion, anti and retroflexion, inversion, elevation, immobility, and various hernias of the uterus.

My remarks will be confined to,

PROCIDENTIA UTERI.

It may be conveniently divided into three stages: In the first stage, the os uteri is somewhat lower in the pelvis than natural, but its relation to the axis of the brim which is downward and backward, is not altered.

In the second stage, the uterus has descended still lower in the pelvis, in many instances resting upon the perineum; the vagina is greatly relaxed and everted, the os uteri having lost the axis of the brim, has assumed that of the outlet, which is downward and outward.

In the third stage, the uterus is precipitated from the pelvis.

It is evident, from a consideration of the causes productive of procidentia, and from a consideration of the sympathetic relations of the uterus with all the important organs of the body, that the general health, preceding and accompanying procidentia, must be more or less impaired. Although neither the uterus, nor its appendages are the first organs impressed in the chain of diseased actions, after they are brought under the influence of disease, they become the cause of great and varied suffering, by the derangement of all its healthy sympathies. We know, that it has striking and intimate sympathetic relationships with the skin, the stomach, the brain, the

kidneys, the bowels, and the nervous system; and that these sympathies act interchangably or reciprocally with each other, and with great rapidity, so that derangement in one of these important organs may speedily bring one or all of them under the influence of disease: each would resent the injury of the primarily affected organ, in its own way.

It does not necessarily follow, that the organ first deranged shall suffer most, or that the amount of suffering in any one organ shall be proportionate to the order of time, in which the different organs are brought within the circle of deranged sympathies; so far from this being true, in many instances, the organ first affected makes no complaint for itself, but forces almost every other organ of the body to complain for it. Some organs have the ability to make others complain for them, in a more eminent degree than others; the heart very rarely complains for itself, while every organ will complain for it to such a degree, that the subjects of diseased heart may readily be supposed to have a multiplicity of diseases. At one time, they may appear to have consumption, at another disease of the kidneys, or any other organ we may please to mention.

The diseases of the uterus are also thus frequently veiled in almost impenetrable obscurity by the active sympathies of other organs. A case, most strikingly illustrative of this fact, is given by Professor Dudley. His patient had all the symptoms of phthisis pulmonalis—she had severe cough, hectic fever, night sweats, colliquative diarrhœa, and discharged a large quantity of pus. On post-mortem examination, no trace of disease of the lungs, could be found; the abdominal viscera had a healthy appearance, but the pelvic organs were destroyed by ulceration. The whole of the uterus, the posterior walls of the bladder, and the front walls of the rectum were entirely destroyed.

But it does not always happen, that these secondary, or rather, these sympathetic affections leave no traces of organic disease behind them: many of the most distressing organic lesions, met with in the practice of our profession are thus produced; for example, surgeons often trace diseases of the joints to sympathetic origin, and treat them most successfully, by addressing their remedies to the constitution, and most generally to the organ first involved; and so soon as they succeed in correcting the constitutional disorder, its sequence, the local disease of the joint, disappears, without the aid of local treatment.

Many cases of consumption in females, can be traced to derangement of the uterine functions, the lungs sympathising with the deranged uterus; but it more frequently happens, that uterine derangements are the sympathetic effects of derangement in some other organ.

I am persuaded that physicians would succeed much more promptly and satisfactorily, in the treatment of the whole catalogue of uterine derangements, by directing their remedies to the organ first diseased, and regarding the uterine affection as a sympathetic sequence of the constitutional derangement. I have never seen a case of deranged menstruation, or leucorrhœa, that did not owe its existence to a constitutional origin, and whose cure would not have been accelerated by remedies addressed to the constitution, instead of the local affection. Restore the healthy condition of the stomach and bowels, the skin, and the nervous system, and all such incidental local affections must of necessity be relieved.

In the first stage of procidentia uteri, the symptoms result entirely from the deranged sympathetic relationships of the uterus, and in many cases they are more distressing than in the latter stages. This is apt to be so, particularly with the delicate and the refined, the nervous, and the irritable; in many cases, and those the most distressing, the displacement is so slight, as to elude the scrutiny of the most experienced observer. But this is not the only malady, which is capable of producing an amount of suffering disproportionate to the injury inflicted on the organ involved. An inappreciable lesion of the mucous membrane of the stomach, will often poison all the enjoyments of life, deranging all the healthy sympathies of the system, and forcing any and every part of the whole man, including mind and body, to utter its complaints, and resent its injuries, while it sits in perfect quiet, as if it had no interest, in the cares, and disquietudes of the whole.

In this stage of procidentia, the patient complains of nausea, acidity of stomach, irregularity of the bowels, palpitation of the heart, flushing of the face, head-ache, irritability of temper, or depression of spirits, differing according to the organs involved in the constitutional derangement. She also generally complains of dull pain in the loins, weakness and pain in the knees, a draging sensation in the groins, a sense of weight at the fundament, and a pressure, which becomes painful from long standing, or walking; these latter symptoms grow worse with the advancing day, in consequence of the relaxed

ligaments being put on the stretch by the erect posture, and they are gradually relieved by the recumbent posture assumed during the night.

The symptoms of the second stage, being more directly produced by pressure of the uterus, on the bladder and rectum, and by the stretching of the ligamenta lata and rotunda, more readily lead the mind to suspect the existence of prolapsus. The patient cannot sit or stand without pain; she is comfortable only while in a recumbent posture; she complains of pain in the loins and groins, and in the hypogastric region; the distressing sense of weight about the anus, valva, and perineum is increased, and an annoying sense of a tumor about to escape from her; she will tell you, she feels as if her whole bowels were about to fall out: she has frequent calls to urinate, the quantity however, voided is generally very small; her bowels have become very torpid: one of the most constant symptoms is a leuchorrhœal discharge from the vagina. Many of the sympathetic affections of the first stage continue to harass the sufferer also through the second. The diagnosis derivable from the symptoms, should not be relied on. Other diseases are capable of producing many or all of them. Manual taxis alone furnishes incontestible evidence of its existence.

The physician should have well established in his mind, the natural feeling and position of the internal organs, as well as the different aberrations from the healthy standard produced by this, and other diseases; having the objects of the investigation thus steadily fixed in his mind, he cannot readily fail to acquire correct information. The investigation should be conducted with great care and tenderness. The patient should be required to discharge the contents of the bowels and bladder, before the investigation is begun, the erect posture during the investigation should be maintained; the object is to ascertain the degree of prolapse, the sensibility of the cervix, and os uteri, the heat, size and weight of the uterus, the relaxation of the vagina, and perineum, and all the departures from the normal condition of the bladder, vagina, rectum, and uterus. The physician should place his left hand above the pubis, while with the index of his right hand, he explores the pelvic cavity; by elevating the uterus on his finger, and then withdrawing it, he is enabled to ascertain with his left hand over the pubic region, the void left by the descent of the uterus, and will also, thus be informed, whether the prolapse is real, or merely apparent from an elongation of the cervix uteri. If there is prolapsion, the nature of the tumor found

in the vagina, or resting on the perineum, will readily determine the fact; prolapsus is sometimes mistaken for polypus, and other tumors, but the presence of the os and cervix can always be detected in prolapsus; in inversion of the uterus, the absence of the os uteri, taken in connexion with the rougher lining of the uterus, compared with the smooth lining of the vagina, will lead to a correct diagnosis.

Treatment.—The treatment relied on by authors, has been, astringent injections thrown up the vagina, pessaries, to retain the uterus in situ, the recumbent posture on a couch, pads and cushions, and steel springs worn externally. I have tried these different remedies, with the hope of meeting the success that authors have declared them capable of producing. With the astringent injections, I could force a temporary contraction of the vagina, which was merely mechanical, and left no good results; in many instances, they proved positively injurious. I have never derived any beneficial results from the pessary. In many instances they have been exceedingly harassing, and embarrassing and unpleasant to my patients, and in some cases, they have done decided injury.

Among all the remedies that have been proposed to the profession, none have been more lavishly praised by great and small, than the pessary. A thousand pens have been employed in their praise; much ingenuity has been exhausted, in efforts to ascertain the best materials for their structure, and the form best calculated to effect all the good, which they have promised. The sponge, the metal, the wood, the ivory, and the glass—the globular, the conical, and the oval, have each had their distinguished advocates, and their popular favor. Their most ardent admirers, have been reluctantly compelled to admit many of the evils, resulting from their use; but being unable to devise a better and surer remedy, they have continued to prescribe them. Many of them admit, they cannot produce a radical cure, and advise their use on the ground of comfort. Others, having more confidence in them, have expected them to cure; but after having promised their patients relief, from the first well adjusted pessary, they have found it necessary to remove it, to make room for a second one of larger dimensions, to fill up the relaxation of the vagina, produced by the first; the second for a similar reason has given room for the third, till at last the attending physician has been compelled to lower his pretensions, and with forced modesty acknowledge to his patient, he can only afford her relief, while she continues to wear the pessary; or in other words,

the pessary has become a part of her life inheritance. Instead of relief or amendment, the poor sufferer is worn out, by the irritation produced by the constant presence of a foreign body.

Death from inflammation, ulceration, or sphacelation of the uterus, vagina, bladder, or rectum at last puts a termination to her sufferings. My success with the pessary, and astringent injections, has been so different from what I was taught to expect, from the writings of Dewees, Columbat, Ashwell, Clark, Churchill and others, I have been almost forced to the mortifying conclusion, that the failure of success originated in my inability to apply the remedies correctly, and not in the remedies themselves. By comparing notes with my neighbors, I found their success was no more brilliant than my own, and after years of unavailing effort, I determined to lay them aside as filthy, unphilosophical, and destructive in their tendency. I cannot perceive any reason why good results should be expected from the use of them, but there are many reasons which should forever scout them from the list of remedial agents. They cannot, by possibility, accomplish the objects of those, who have recommended their use. Many of them affirm, that the uterus is retained in situ, by the vagina, and the prolapsus uteri is a consequence of flaccidity or debility of that organ. If this be the true philosophy of the disease, it is perfectly evident to my mind, that the treatment by the pessary, is only calculated to increase the malady. The first effect of the pessary must be additional enlargement and flaccidity of the vagina; and consequently, the uterus must prolapse after its use, if it had never done so before, unless the pessary be worn sufficiently long to produce inflammation, and consequent stricture. Others, who recognize the ligamenta lata and rotunda, as the chief supporters of the uterus, are equally unphilosophical, when they recommend the use of the pessary.

Every fibre of the animal frame is, by a law of our Creator, opposed to inertia, and whenever any part is taught that its functions are useless, or that they can be performed without their aid, they cease to act, and in a short time, lose the ability to do so. No man in his senses, would think of putting a weak arm in a sling, so as to prevent the use of its muscles, with the view of restoring strength to the weakened limb; every body would at once see, that the tendency of such a prescription would be to debilitate the weakened part still farther.

The female mamma naturally secretes milk for her offspring,

so soon as its separate existence requires it, and every old woman knows, that if the child is withheld from the breast a few days, it loses the power of secreting; yet learned men, whose talents challenge and obtain the respect of the medical profession, gravely tell us, the uterus is held in situ, by the broad and round ligaments, that prolapsus results from weakness of those ligaments, and to cure it, the weight of the uterus must be taken off, by wearing a pessary for months or years, till the ligaments, by long quietude, are enabled to bear the burden their Creator has imposed upon them!

To my mind, it is evident, this prescription is at war with the physiology of every part of the human system, and instead of giving tone to the weakened ligaments, its tendency is to produce entire paralysis, of the already debilitated parts. Whether the vagina, or the ligaments separately or jointly furnish support to the uterus, the prescription is equally absurd and mischievous.

Some affirm that the ligamenta lata and rotunda are elastic in their character, and that it is the nature of all elastic bodies to resume their natural position, so soon as the weight is taken off; and that the pessary, although it dilates the vagina, may cure in consequence of this law. It is true, to a limited extent, they are elastic bodies, and that the power of resuming their natural position, is one of their inherent qualities; but it is evident, they must have lost their elasticity to a very considerable extent, before they would have permitted the uterus to descend, and consequently, it is necessary to look farther for a remedy, than a mere mechanical ministration to that which is only a sequence of disease. Even if the taking off the weight of the uterus, should enable them after a while to resume their natural position, I apprehend that inflammation or ulceration of the vagina and os uteri would in many instances be produced by the presence of the pessary, before the ligaments could regain their natural tonicity; and in that way the remedy would prove a worse evil, than the original disease. All admit that the cure by pessary is tardy, frequently requiring six months or a year. I do not feel the least disposition to question the veracity of the gentlemen who have lauded the pessary—that they have judged incorrectly, I have no doubt. It requires but little experience in the profession of medicine, to learn, the liability of all men both great and small, to draw incorrect conclusions. False facts, have done infinitely more vile to medical science than false theories. That many females have

recovered while wearing the pessary, I most cheerfully admit; I could not do otherwise, without questioning the veracity of some of the best men that have ever lived; whether the pessary cured these females or not, is entirely a different question. If my view of the causes productive of the disease be correct, there is little difficulty in assigning the proper reasons for the cure. If the disease has a constitutional origin, their general health has been restored in despite of the deleterious influence of the pessary, and of course, the local affection has of necessity been relieved. It was once a settled fact, that a fracture of the cervix femoris and a transverse fracture of the patella could not be cured by bony deposit, but by ligament; but it is now well known, that they unite as readily by formation of bony matter, as any other bones of the animal frame. For many years it was a settled fact, that the peruvian bark and its salts were tonic and stimulant, and that they were contra-indicated by the presence of even slight fever—now, they are confidently relied on, as the best febrifuges; latterly the sulphate of quinine is given in such various states of the system, and such contradictory effects are attributed to it, it is a difficult matter to determine to what class of remedial agents it belongs; it seems likely at last to stand at the head of a class denominated anti-periodics.

It was well settled by Broussais, that all fevers were the result of Gastro-Enteric inflammation—now, his views are overthrown, and his main facts denied. Clutterbuck established the fact that all fevers, depended on inflammation of the brain; now, his facts and theories are alike destitute of advocates. For centuries, it was a well settled fact, that cold water applied externally to patients laboring under small pox, or any other of the severer Exanthemata was absolutely forbidden—now, such patients are allowed to drink, and sponge themselves freely with cold water, and its use is followed by the happiest results. In chemistry, it was universally believed, that fire, air, earth, and water, were the only simple substances in our world—later experiments have shown that not one of them is a simple substance. Every branch of science, has been impeded in its march, by the accumulation of false facts. It is then manifestly our duty, as philosophers, not only to subject theories, but facts also, to the severest scrutiny; and no one has a right to complain, should his facts not meet with a ready reception, nor has he a right to suppose that his moral credibility as a witness is suspected, should his facts finally be placed in the interminable list of false facts.

The confinement of a patient labouring under prolapsus uteri, to a couch, has been as inefficient, but not so injurious in my hands, as the astringent injections and the pessary. Whenever I have confined my patient, for a length of time to her couch, I have universally discovered that her general health was seriously injured, although I had succeeded in relieving her, for the time being, of the distressing symptoms arising directly from the pressure of the prolapsed womb on the surrounding parts, and from the stretching of the weakened ligaments. Dr. Hamilton, whose work abounds with sound maxims and clear discriminations, long since saw the mischievous tendency of the pessary, and the recumbent posture as ordinarily prescribed, and taxed all the powers of his great mind, to devise a new and more efficient remedy. He first attempted the cure, by producing adhesions of the vaginal walls, but his success was such as caused him to abandon any farther trials. But if the uterus derives its chief support from the vagina, neither he, nor any other person has proposed a remedy so well calculated to cure prolapsus. It would necessarily succeed, in every instance where extensive adhesions were produced: inasmuch as we have no well authenticated case of permanent cure, thus effected, although we have the history of many cases where adhesions have been made extensively, I conclude, the vagina does not furnish a very material part of the support of the uterus. When the writer saw that Dr. Hamilton had abandoned the pessary, and the recumbent posture, as hurtful, he hoped that a safe and efficient remedy would be proposed for the acceptance of the profession; but his hopes have been disappointed. Dr. Hamilton's instrument, and many of the improvements upon it, have relieved much suffering; and are not obnoxious to the objections which militate so forcibly against the pessary; but they cannot *cure* prolapsus uteri, nor can they possibly reach the cause of the disease. They afford much comfort to the sufferer; she is enabled to walk with more ease, and they prevent the application of the pessary. Dr. Hamilton's instrument affords most support, where it is least needed. The abdominal muscles need the support of machinery, much more than the muscles of the perineum, and that will prove to be the best instrument, which affords the most regular and efficient support to the abdominal muscles. In a majority of cases, those muscles are relaxed, especially is this the case, with women who have borne many children; and this relaxation permits the abdominal viscera to descend towards, and

into the pelvis; thus the uterus and other pelvic viscera are forced out of their natural position; in many instances, this vis-a-tergo is sufficient to produce prolapsus uteri, and in all such, it will be impossible to effect a cure, till the weight of the superincumbent bowels is taken off, and the proper tone of those muscles is restored. External machinery can take off much weight, but cannot restore healthy tone to the muscles; all such attempts, if long persisted in, must tend toward producing paralysis more than strength. No part of the animal frame can remain healthy, except when in the discharge of its natural functions. I am far from wishing to discard external machinery from the list of remedies, but would never deceive myself with the hope of effecting a cure with them. I have examined several of these instruments which are capable of doing much good—among the number, I would very respectfully notice that invented by Professor Annan. His instrument is light, easily adjusted and removed, by the lady herself, and must afford much comfort to this unfortunate class of sufferers.

In all instances, when such instruments are worn, the lady should be directed to take them off so soon as she ceases to take active exercise, otherwise they will produce serious mischief. The writer was once induced to wear a belt for a very painful affection of the loins, produced by traveling on horseback too soon after a severe attack of fever, which occasioned him much inconvenience in riding or walking. The belt when tightly worn relieved him of pain, and enabled him to attend to the active duties of his profession, but in a few months, he found that he was losing the strength of his lower extremities; he took off the belt, under the conviction that it was the cause of the weakness of his limbs, and that it would finally produce paralysis. In a short time, his limbs regained their lost power, and he has never ventured to wear a belt since, except for a short time, when compelled to endure great fatigue, or to exert himself violently. Worn in that way, it has afforded him much comfort. Is there nothing to be done? Is there no hope of curing prolapsus? Unhesitatingly I answer, it can always be cured, where there is no accompanying organic disease. But it never can be cured by machinery of any kind, never by astringent injections, and never by confining the patient to a couch.

A more comprehensive view of the malady must be taken, before we can promise ourselves success. We must cease to view and to treat it as a mechanical disease, or as a primary

affection. It is, so far as the writer's experience goes, never an original affection, but is a mechanical result of some other malady, and can only be treated scientifically or successfully, by seeking out the primary affection, and tracing it through all the diseased sympathies, till we arrive at the effects produced on the uterus and its appendages, and then continue to investigate, until we have ascertained as far as possible, the sympathies which have been deranged by the uterus having been brought into the great chain of diseased actions. There is invariably either chylopoietic derangement, derangement of the healthy functions of the skin, or of the nervous system. In a vast majority of cases, chylopoietic derangement is the most prominent in the chain of morbid effects, and often the first; but in many the first morbid impression is made on the skin or on the nervous system. It is not only necessary to restore the general health, but it is absolutely necessary to take off the weight of the uterus from the relaxed ligaments, by the most rigid adherence to the recumbent posture, without any regard to time. The patient must not arise until the ligaments have acquired sufficient strength to hold the uterus in situ. To avoid the evils attendant on the recumbent posture, it is absolutely indispensible for the patient to have every fibre of her muscular system exercised daily to the full extent that she can bear. She should be placed on a smooth, well carpeted floor, of a large and well ventilated room, from which her shoulders should never be raised, till the suspensory ligaments have acquired strength to sustain the uterus in its proper position. Her diet must be strictly regulated by her general health, and the peculiar condition of the chylopoietic viscera, her bowels must be kept regular, all the secretions and excretions of the body must be attended to, and proper attention should be directed to her mind. The sources of her amusement as varied as possible; such company as is interesting; and she should be furnished with some kind of employment that she can accomplish without too much fatigue, to relieve the tediousness of the hours as they appear to her to creep by; her skin should be well rubbed two or three times a day, to accelerate the capillary circulation; if there is nothing forbidding it, her body and limbs should be sponged daily with salt water; if that cannot be done, she should be rapidly and well rubbed with a coarse towel, which has been saturated with a salt brine, and well dried before use. The most important items in the cure, are the recumbent posture, abundant exercise, and a well regulated diet. The reason

why the recumbent posture has heretofore disappointed the hopes of the profession, and injured the health of the patients subjected to it is, that it has been used only as a mechanical agent to take off the superincumbent weight of the abdominal visera, and of the uterus itself, while the great law of the Creator, that man shall earn his bread and his health by constant exercise of his animal frame, has been totally disregarded. No human system can remain healthy without exercise; no single fibre of the whole animal frame can remain so, any longer than it continues to discharge the active duties imposed upon it by its Great Author. The eye that is excluded for a long time from the stimulus of light, ceases to be an organ of vision. The limbs become paralized for want of exercise. The mind, great as it may have been in its original organization, and varied as may have been its attainments, will sink away into idiocy, if it ceases to be employed. The heart, with all its warm gushing affections and tender sensibilities, becomes cold, selfish and worthless, when all its objects of interest and affection are withdrawn. The writer saw a most striking and melancholy result of losing sight of this great law of our nature, in a gentleman, who for many years was the subject of a distressing neuralgia—the influence of light on his eyes was so painful that he was compelled to live in a room made as dark as possible; the chewing of any substance whatever, although his teeth were free from caries, gave him so much pain, that he did not attempt it for several years. The functions of the skin were neglected, in consequence of its extreme sensibility—the effects of this course were, the eye nearly lost the power of vision, although its coats remained free from inflammation—his teeth became so uneven and irregular that they were unfit for use, and his skin as rough and scaly as a fishes—his mental powers were unimpaired, because his excellent father and sisters supplied it abundantly with food.

But how is exercise to be taken while the patient is on the floor? Nothing is more easily accomplished. Direct her to roll herself from one side of the room to the other as many times as her strength will allow. After resting a sufficient length of time, direct her to fasten her feet to stirrups composed of broad list, or some other soft material, which are to be tied to some heavy article of furniture; she may then, with her feet thus arranged, attempt to draw the article to which the stirrups are attached, until she is again fatigued, and then again after resting take hold of her stirrups with her hands,

and exercise her hands and arms in the same way. She should then be directed to climb the wall of her room, with her feet foremost as high as she can, and remain in that position as long as possible. This round of exercise can be gone through at least twice a day, or, oftener according to her strength and previous habits. The remainder of the day may be devoted to society, reading, writing, sewing, or knitting, as the lady fancies. Explain to the patient the nature of her disease, and your reasons for requiring her to exercise every muscle of her body thus regularly. Let her understand distinctly that all the medicines in a thousand drug stores cannot cure her, and that it is to be the great business of her life to cure herself. Give as little medicine as possible in each individual case, assist nature properly, and she will inevitably effect the cure. The indications of cure are fully met by the plan I have sketched, and if it is judiciously executed for a sufficient length of time, a sound and permanent cure will always be effected. No directions can be given as to the time the patient may be taken from the floor; where the recuperative energies of the system are strong and lively, her general health not badly broken, and the prolapsus of recent occurrence, six or eight weeks will be sufficient to effect a cure; cases of long standing joined to a broken down constitution, may require several months or more than a year. Whether the application of galvanism to the loins, valva, and rectum is capable of expediting the cure, I am not able to say; but from its well known effects in stimulating and giving tone to relaxed muscular fibre, I augur well of its application, and am determined to give it a fair trial at the earliest opportunity.

When the ligaments of the uterus become sufficiently strong to hold it in propria situ, the patient may be permitted to stand on her feet; or which is safer and preferable, she should be required to take a large portion of her daily exercise on her feet and hands, so that the pelvis would be elevated above the chest; she should return very gradually to exercise in the erect posture. I would direct laboring women especially, to wear some instrument which would afford support to the abdominal parietes, the loins and the perineum, but with the most positive instructions to take it off the moment she ceased to walk. If worn constantly it would debilitate the muscles it was designed to strengthen.

In procidentia or complete prolapsus, the tumor is external. The uterus is thrown without the pelvic cavity, and sometimes

carries a part of the rectum, bladder, and vagina with it. It is represented by authors as attaining to immense size. The writer has seen two cases: the first was an old African woman of small stature, but of hardy constitution; the second was a negress of fine athletic frame and healthy appearance, of thirty years of age. It was discovered accidentally in the old woman. She said, she had it for a long time, and that it did not hurt her. The tumor was as large as a hen's egg. Nothing was done for her, and she continued to labor on a cotton farm. The tumor in the second case was about the size of the first. The woman said it came down frequently, and occasionally gave her much pain. I saw her but once, and know not what treatment, if any, was resorted to. It is a remarkable fact, in many of the reported cases of procidentia, that the patients suffer little inconvenience, except from the weight and size of the tumor. Many of them are reported to have continued many years in the most laborious employments. In such cases the same general treatment as that recommended for the cure of prolapsus, should be persisted in for a great length of time, and the same happy results may be expected in all, where neither disorganization of the uterus nor paralysis of its proper ligaments have been effected. Proper measures for the reduction of swelling and inflammation should be resorted to, before any attempt is made to return the tumor into the pelvic cavity, otherwise aggravated pain and inflammation might make it necessary to permit it to return to its external position. Too much care cannot be taken, when permitting the patient to begin to exercise on foot, or return to her usual employments: a slight error may precipitate the womb from the natural to its diseased position, and then the poor sufferer will be compelled to undergo another long period of horizontal confinement. It is safer and better to keep her confined a few weeks longer than necessary, than to run the risk of spoiling the fruits of all her labor and self-denial, and your watchfulness, by rising to her feet a single moment earlier than proper. I repeat again, too much care and vigilance cannot be exercised, at this important crisis. The reputation of the physician, and the well being and happiness of the patient, are alike at stake: failure here may ruin both. Few patients can be found who would again yield their confidence to their medical attendant, so far as to undergo all the privations of a second confinement, after the failure of the first. Exercise in an open carriage, with the pelvis slightly elevated above the shoulders, is much safer for

several weeks after arising from the floor than exercise on foot. A hammock suspended in the open air, in a shaded spot or in a room, forms an admirable mode of exercise.

ART. II.—*Remarks on a peculiar Epidemic Fever of Miami county, Ohio.* By G. VOLNEY DORSEY, M.D., of Piqua, Ohio.

The northern portion of the county of Miami, lying to the west and north-west of the town of Piqua, consists principally of a rich, level country, covered with a heavy growth of timber. The deep rich stratum of mould, the accumulation of many centuries of vegetable decay, reposes on a substratum of clay, well calculated to resist the ready percolation of water; add to this, that large quantities of fallen timber cover the ground in such way as very much to prevent the draining of the water from the level surface, and it will be readily supposed that this section of country is wet and marshy, and will continue so until completely cleared of timber, when it will be found there is sufficient difference of level to admit of easy drainage by ditches. The marshy face of the country has caused it to present a forbidding aspect to the settler; so that it is yet far less cultivated and populated than the neighboring tracts. Throughout this tract of country, extending four or five miles to the west and much farther in a northern direction, the water is generally not good, the wells not being deep, and apt to fail in the dry season, and few springs being found on account of the flatness of the surface.

The fevers of this region, which are not usually more severe or fatal than those of the surrounding country, have, in some seasons, presented peculiarities which are worthy of observation. The practice in this section falling principally into the hands of the physicians of a small village west of Piqua, my attention was for some years not particularly fixed on the character of its diseases, and it was not till the month of June, 1842, that any cases were particularly presented to my notice. I was then called in consultation to visit a family where five persons were ill of this prevailing fever; one of the number was evidently dying, two others were scarcely expected to live. I copy from my note book the following detail of symptoms as given to me and presented by my own observation: "After the chill usual in the beginning of febrile

attacks, there came on severe vomiting, coldness of the extremities, burning and sense of weight in the stomach, accompanied in most cases by a strong pulsation in the epigastric region, rapid but rather feeble pulse, great thirst, tongue covered with a thick white fur, considerable constipation of the bowels, though this could scarcely be called obstinate, inasmuch as medicines if retained, seemed disposed to operate as well as in common cases of bilious disease. Great difficulty was found in relieving the coldness of the extremities; sinapisms, hot frictions, blisters &c. were frequently applied in vain. The matter ejected from the stomach was at first rather a viscid mucus, but usually became soon bilious, in the progress of the disease assuming a peculiar greenish blue appearance, similar to a mixture of bile and indigo. After a few days continuance of these symptoms, accompanied in most cases with a difficult and laborious respiration, indicated by a heaving of the chest and frequent lengthened sighing, the patient became dull and comatose; there was strong pulsation of the carotids, but no increased heat of the head; the eyes were dull and glassy, and complete stupor and death closed the scene. There was no delirium in any case. The epigastrium and right hypochondrium were uniformly sore to the touch." Of the five individuals attached in the above mentioned family, *four* died in spite of what was deemed the best treatment and the advice of several of our ablest physicians. These cases occurred at a distance of seven miles from town, and I saw no more during that season. The succeeding year, 1843, about thes ame time and in the same neighborhood, the disease broke forth with increased severity. In a very flat district three or four miles square, scarcely a family was entirely exempt, and in several from two to five cases occurred. The symptoms differed in no material respect from those observed in the preceding year. I was again called to attend these cases on account of the physician of the before mentioned village being himself severely attacked with the disease. Instructed by the unfortunate issue of the cases of the preceding year, I determined to adopt a new mode of treatment—convinced by the urgent symptoms that inflammation of the stomach existed, I resolved in spite of cold extremities, feeble pulse, and general apparent prostration, to use the lancet unsparingly, knowing that nothing short of the most vigorous means could save the lives of the persons entrusted to my care. Accordingly on my first visit I bled every case, and ordered the bleeding to be repeated if obstinate vomiting recurred in

my absence, and it was repeated in several cases three or four times; blisters, cathartics, &c. were employed as usual in such cases, and I had the satisfaction of seeing every patient recover under these means. In a section of country on Stillwater river, about twelve miles from Piqua, where the disease also prevailed, I recommended to the practising physician a similar course, and it was found almost uniformly successful; and in confirmation of the excellence of the practice I may mention that, where this remedy was neglected, the issue was very generally fatal. Blisters to the stomach, to the spine immediately over the cœliac plexus, and the endermic application of morphine, were found advantageous. Opium by the mouth was not well borne. Calomel and opium, in which I had been accustomed to place great reliance in cases somewhat similar, was not beneficial, and was in many cases hurtful. Minute doses of Ipecachuana, James' powder, grs. iii. and iv. every two hours, (Wilson Philip has recommended small doses of tartarised antimony in inflammation of the stomach,) and castor oil and turpentine were the best internal remedies. As soon as the irritation of the stomach had subsided and I found my patient free from thirst and burning, I used the cold infusion of Quassia and orange peel, drank freely through the day, and found its action very beneficial in restoring the lost tone of the organs. There is something peculiar in the action of Quassia on the gastro-intestinal mucous membrane; it is borne when no other tonic is at all admissible, and so far as my experience goes, never produces fever or any unpleasant stimulating effect. As an example of the severe nature of this disease I copy the following case, which occurred in June, 1843: "In my visit through the infected district, I called this morning to see Mrs. P. who had for some days manifested symptoms of the prevailing epidemic, by occasional vomiting, thirst and burning heat of the stomach. Had taken a great quantity of teas under the direction of a 'sick stomach Doctor.' Her case not appearing urgent, I bled her and ordered a dose of castor oil and turpentine, with sinapisms to the stomach, &c. After my return home in the evening, I was again summoned to her by word that she was dying in spasms. On my arrival I found her exceedingly prostrated, with the most alarming symptoms of the disease. The hands and feet were very cold, pulse scarcely perceptible, features contracted, vomiting continual, accompanied with severe cramps of the extremities and a constant cry for cold water. Her medicine had been rejected,

and there was no movement of the bowels. The extremities were immediately enveloped in strong mustard drafts; happening to have with me a piece of caustic potash which I had used during the day in making an issue, I applied it over the pit of the stomach and denuded a place about an inch in diameter, to which I applied a grain of sulphate of morphine. A large blister was applied to the spine opposite to the stomach. In half an hour the vomiting ceased, the thirst became less urgent and was relieved by small but frequent doses of solution of crem. tartar; the extremities became gradually warmer, although it was several days before they acquired the natural temperature; the bowels were moved in the course of the night, and my patient recovered slowly but without any bad symptom."

The next year, 1844, several cases occurred in the same neighborhood, and in the adjacent country; and I observed that at this time they were not entirely confined to the low grounds; in one family six cases occurred, proving fatal in one instance, from obvious neglect of early active treatment, the others recovering under the means which proved successful the preceding season. During the summer of 1845 no cases of the disease were seen, but during the warm weather of 1846 I met with a few cases in the same vicinity, evincing similar symptoms and yielding to like treatment.

The western practitioner who is familiar with the diseases of many of the localities in this and neighboring States, where the disease usually termed "sick stomach or milk sickness" is said to prevail, will already have recognized in the above description, many symptoms supposed to indicate its presence. Among the people of the neighborhood this was the common name given to the disease; and it is for the purpose of making some observations on this subject, that I have so minutely described the epidemic in question.

The existence of a disease communicable by means of drinking the milk and eating the butter and flesh of beef cattle is universally known and acknowledged in the West. This poison is found restricted to particular districts of country, and these are similar in character to that described at the commencement of this article. Various attempts have been made, and are still making, to trace to its source this poison; and it has been successively located in the water, the earth, and in various species of plants. That there are several plants—among others, the rhus toxicodendron—which eaten by cattle, are capable of producing a disease known familiar-

ly in the West as the "trembles," is undoubted; how far this disease, so produced, can be communicated to the human species, has never been shown by direct experiment. It is no less certain, that in those districts of country where cattle are so affected, and also occasionally in other parts, epidemics are frequently found prevailing in their symptoms so nearly resemble the effects usually attributed to milk poison, as in my opinion to defy the diagnosis of the most skilful and careful observer. Hence it has long been the opinion of many respectable practitioners, that no such disease as that usually termed milk sickness really existed; in a word, that all those commonly attributed to the effects of milk, cheese or butter, were really of miasmatic origin; in fact, only a peculiar form of epidemic fever. It will be found, however, that in those districts where this disease is common, there exists such an abundance of proof of its direct transmission through these media, as almost to set doubt at defiance; while it is equally true that in the same districts we find the greatest diversity of opinion as regards its aqueous, atmospheric, or vegetable origin. From a careful observation of the disease in its transmitted and untransmitted form, if I may so express myself, that is, in cases whose origin could be plainly traced to some unhealthy article of diet, and in others, where no such cause could exist, I have been totally unable to lay down any diagnostic or distinctive marks between the cases. The same obstinate vomiting, the same sense of burning in the stomach, severe thirst, heavy, nauseous smell of the breath, palpitation in the epigastric region, coldness of the extremities and constipation of the bowels, signalize the disease in both its forms. There can exist no doubt that the disease does arise in the human subject without the introduction of poisoned aliment into the stomach; that a peculiar miasma has the power of producing an inflammatory state of the gastro-intestinal mucous membrane, giving rise to all the peculiar train of symptoms characterizing this disease. How this miasma is introduced into the system, whether inhaled by the lungs or swallowed with the saliva, I will not pretend to decide; but if the disease has this atmospheric origin in man, may it not arise in the same way among cattle, and from them be transmitted by milk or flesh to man. The matter of bilious fever becomes under some peculiar circumstances so concentrated and virulent as to pass readily from an infected to a healthy subject; in the Oriental plague, which is probably only fever modified by local circumstances, the breath and

the touch become infectious; and the closest and most scrutinizing observation will probably determine, that the "milk poison" of the West is only an epidemic fever, capable like variola vaccina of affecting both man and beast. Hence we perceive why so many fruitless attempts have been made to discover the vegetable which *in all cases* produces this poison, and why so many diverse opinions have existed regarding its origin.

The treatment, however, which is always a matter of primary importance, may, in my opinion, be held as decided; instead of needlessly looking for antidotes for an unknown poison, a business which employs all the "milk sickness Doctors" of the West, we are to treat the disease as a regular gastritis or gastro-enteritis; the lancet and epispastics are our most important therapeutic agents, and these are to be aided by mild cathartics and other means calculated to allay the irritated state of the mucous membrane. This pathological view does away with much of the empiricism which has hitherto attended the treatment of this disease, and sets at rest a question which has caused much speculation, heretofore almost entirely fruitless, among the physicians of the Western country. The idea of encountering a new and specific disease has led to an endless succession of experiments among a portion of the profession having unfortunately little scientific knowledge; and the result has been so little satisfactory to the community, that the treatment of these cases has usually been taken out of the hands of the regular practitioner, and consigned to the mercy of quacks; rendering that which, under proper treatment, would have been always a manageable disease, one of frightful mortality. I sincerely hope that the view which I have presented may lead to that systematic and sure mode of encountering this epidemic, which I am convinced will rob it of more than half its terrors. The physician, however, who treats this disease, must be like Cato, "*tenax propositi;*" he must not allow the clammy skin, the flagging pulse, the cold extremities, to deter him from the use of his lancet; nor must he fail to pursue the malady through its whole course with that untiring energy and perseverance which can alone ensure success.

ART. III.—*Open Scirrhus of the Cardiac Orifice—Cure.* By B. RUSH MITCHELL, M. D., U. S. Navy.

The annals of the profession, so far as I am acquainted, present few well authentic cases of cure of the disease above named; and therefore I thought that the record now to be presented, might not be an uninteresting detail.

The patient, Mrs. Wyman, a married female, æt. 48, of a sallow, cadaverous hue of countenance, active habits, spare frame, came first under my notice when attending physician of the St. Louis City Hospital—an establishment highly commendable to the enlightment and public spirit of the citizens of that fast increasing city—in which establishment she held the office of matron.

At the period of my first acquaintance with her, her mind and body were both very active, her general health, to the eye, good. She, however, soon informed me that she had been for years the subject of an organic disease in the region of the stomach, the most prominent indication of which and its nature was, *an utter incapacity of passing into the stomach any solid food.* If she attempted it, the bolus would pass easily down to a certain point, which she could accurately point to, and corresponded exactly with the location of the cardiac orifice. After remaining for a period of time ranging from 1 to 10 minutes, in the indicated site, a feeling of acute pain was experienced, and almost simultaneously, the bolus was ejected, wholly unchanged. Her digestion of fluid aliment however, was painless and perfect, its passage into the stomach causing no uneasiness. Upon fluid or semi-fluid aliment then, she had lived for five years.

Such was the history of her case, as detailed by her to me; and if I mistake not, (for I write from recollection, not having my notes with me,) she had been several times examined with œsophagus tubes, etc. etc., with the effect of fully satisfying her examiners of the existence of stricture. I had promised to her and myself, a thorough examination of her case, as soon as I had arranged affairs in the hospital; and gotten through with the details incident to opening a new institution containing 105 patients. But, prior to this leisure having arrived, worn down by over exertion and mental anxiety, Mrs. W. was attacked with a severe dysentery of a typhoid grade, which at that time, also attacked 30 out of 105 patients in the hospital.

Her disease was characterised by the usual symptoms of

dysenteria acuta; superadded to which, however, was a depression of mental and nervous energy, and more than ordinary gastric irritability. The idiosyncracy of the patient forbidding the use of opium, her disease was combatted with calomel and krameria, aided by a blister to the abdomen, suppositories, act. plumb, port wine, wine whey, and other stimulants, to rally nervous energies. Soon discovering evidence of periodicity in the disease, I directed quinine, with the happiest results.

At this stage of her disorder, owing to an excessive influx of new hospital cases, I found it necessary to send to Mrs. W.'s family physician, to practice upon her, in conjunction with me. The line of treatment sketched was pursued; and about the twelfth day, all traces of her dysentery had disappeared.

Now, however, she began to complain of a *gnawing* pain in the situation of the cardiac orifice, for which hyoscyamus was ordered; but which continued without mitigation for 24 hours, alternating with a feeling of sinking in the epigastrium, at the end of which time vomiting set in, the ejection being glairy, and tinged with blood, with a few streaks of pus. Shortly after, a copious dejection, in quantity nearly the capacity of the chamber vessel, took place, the dejection consisting wholly *of ill conditioned pus*, of a yellowish white, or even milky color, and of slight consistence. The odor was powerfully intolerant.

From this date, for a period of three weeks, the dejections and ejections continued of the same character and quantity—no food of any kind, or medicine being retained upon the stomach for more than a few minutes. Medicines and food were ejected without an effort, as though they did not reach the stomach. Emaciation consequently became very conspicuous; attended with such loss of strength as to render the patient unable to help herself. During all this time, the patients mind was calm and collected. She felt that she would die; and spoke of it as a happy release from the pain she endured in the epigastrium, which she described as excruciating. The diagnosis made out, in view of all the signs and symptoms, by myself and Dr. Knox, was, ulcerating scirrhus of the cardiac orifice of the stomach; the indications, to arrest the ulceration, and support the patients strength—positions which were sustained by consultation, at the instance of the family, with Dr. Beaumont, late of U. S. A., and Prof. Johnson, University of Missouri.

In accordance with the diagnosis and indications, nit. silver, in pill and solution; acet. plumb, sulph. zinc, vegetable astringents; the stronger acids; counter irritation; ox gall, etc., internally, were had recourse to: while nutrient injections; sponging the body with brandy, whiskey baths, and brandy juleps, port wine soup, etc. etc., constituted other means. All these, however, were unavailingly employed for a period of eighteen days—the patient waxing worse and worse. None of the remedies staid down sufficiently long, to exercise any beneficial influence—all being almost instantly rejected; as was her food. Medicinal injections were also employed, almost ad libitum.

Having a little leisure from my hospital duties, I devoted more time to the case of Mrs. W.; and determined to employ the following mixture.

℞. Cupri Sulphas,	℥i
Spts. Lavander, comp.	℥i
Tinct. Moschi,	℥iiii
Aqua,	℥ii. M.

Of this, I directed a teaspoonful every two hours. The first dose was soon rejected—the second remained fifteen minutes before being thrown off, although given ten minutes after the rejection of the first, according to my directions. The third dose *was wholly retained.* Cautioning the nurses against allowing either food or drink to be taken, I left directions that six doses should be given during the night, after which they might suspend the administration. In the morning, I learned that all the doses had been retained; that the dejections had diminished in quantity and frequency, having a more pus like appearance; and that the epigastric pain had measurably subsided. The patient expressed herself as feeling much better; and desired some partridge meat to suck, which I allowed her. The prescription was continued every three hours; and renewed during the day; so that within 36 hours, she took 120 grains of sulphate of copper, all of which, save the first dose, was retained.

The remedy was continued at longer intervals for two days more; when the discharges having ceased, nit. argent. was resorted to for a few days; and followed by a weeks use of calomel and dandelion pill. At the end of this time, careful nursing and a tonic treatment as respected diet and medicine, completed the restoration to health.

In ten days from the retention of the copper prescription, she was able to sit up in a sick chair; and one day, much to

her joy, by accident, discovered that the passage to her stomach was free to the *largest boluses.* She was, when I last saw her, two months ago, and seven months from her illness, in the enjoyment of better health than since her young days; *swallowing any kind of solid food with perfect ease,* and taking great delight in eating meat.

The case, especially as it eventuated in so perfect a cure, is, I think, a remarkable one. Never, not even in cholera, or diarrhœa, have I seen such profuse and oft repeated discharges. In the height of her disorder, they must have amounted to three or more gallons daily; and continued unchecked for twenty days. To the combination of cupri sulphas, to which I had recourse, aided by the iron constitution of the patient, the favorable termination of the case is fairly to be ascribed; and to narrate the facts in this connection, without any speculation as to the modus operandi, has been my motive for making this communication.

ART. IV.—*The importance of Obscure Symptoms, in forming a diagnosis in obscure cases; illustrated by a case of circumscribed disease.* By G. SPRAGUE, M. D., Kalamazoo, Michigan.

Although, in the practice of medicine in the west, our attention is generally called to the administration of *antidotes,* for the eradication of that subtle, and death dealing poison, malaria, as also, (to use the style of that plain but pungent writer, Dr. Armstrong,) to remove the *disorders and diseases* which it engenders: and, although many western practitioners have acquired for themselves a lasting reputation, and a fine practice, for their success in the use of these antidotes, still we fall far short of what is reasonably expected at our hands, as also to overlook a great measure of our duty, when we would be content in having duly appreciated the powerful curative virtues of a certain remedy, over the various forms of our malarious fevers. When if we take the right view of a great victory achieved by the healing art, it is when that victory is gained over a long standing disease, the natural tendency of which is to a fatal termination, and the chances of recovering from which, are hopeless, if the curative efforts of nature are to be the sole dependence.

But to the case. Some months since, the writer was requested to meet a neighboring physician in counsel upon a

case, of which the following is a brief history. The patient was a lady aged thirty-six years. It appeared that she had recently arrived from the State of New York; that during the journey she had been somewhat exposed to inclement weather, having had her feet quite wet for some time, &c. She was in good health when she started upon the trip, but by tracing her habits back, we found that she had for some weeks previous to her leaving home, been closely confined with sick relatives, which cases, report said, were *typhus fever.* Several of which proved fatal. Upon her arrival among her friends in this State, (in the month of June,) she was attacked with fever, accompanied by considerable, although not an unusual amount of headache. The family medical attendant was called, who pronounced it a simple remitting fever, and treated it accordingly, by mercurial cathartics, Dover's powder, quinine, &c. After being under this treatment for some three weeks, and not recovering, the writer was called in counsel. We found the patient a good deal emaciated, with small pulse, a little wiry, numbering 125 at one o'clock, P. M., no pain in the head, although she described the presence of a 'curious sensation,' not amounting to pain, and apparently rather 'deep seated;' this sensation had not created any notice, until attention was called to it by our interrogations. There was no increase of external heat at any time of the day; no tenderness in any part of the abdomen; no unhealthy sounds in the respiratory organs; no special thirst; nor any desire to take food. In addition, we learned that the patient slept but little, although inclined to lay perfectly quiet, and apparently asleep, most of the time. Upon interrogating the patient ourself, we discovered a little obtuseness of hearing, and a disposition to draw out her words, taking probably twice her natural time to communicate a sentence; she also described food as having no particular taste, though the tongue was entirely clear from coating of any kind, and as we were assured, had been from the first.

The symptoms which appeared to me particularly worthy of notice, were the conditions of the pulse, the dullness of hearing, (though slight,) the drawling use of words, defect of taste, clearness of the tongue from coating, the strange sensation in the head, and a disposition to be rather peevish and sarcastic in her bearing. From these symptoms, we diagnosed, circumscribed disease of the brain, or of one or more of its membranes, at the origin of the eighth and ninth pairs, and other nerves supplying the ear, tongue, larynx, &c. In this,

we were opposed by the attending physician, who contended that all the abnormal symptoms present, were the result of debility, with an hysterical tendency. Not succeeding in overcoming this opinion, we advised the use of wine, and the muriated tinct. of iron, to be used for a few hours as a test. This was agreed to, with the understanding, that should this course not improve the symptoms, we were again to meet, my opinion not being made known to the friends. Nearly a week elapsed, when we were again called to see the patient. We found her at this time, still more reduced, pulse increased in quickness, and smaller to the feel, with other symptoms exactly as before. We learned, that under the use of our prescription, used only for a few hours, the pulse was rendered more frequent, with considerable throbbing of the carotids, which had not before occurred. We were also informed that the attending physician, after trying the tonics, declared that nothing ailed the patient, save debility, with hysterical symptoms, and a "determination to die, in spite of medicine," and left her for their nursing to accomplish what it might. Under these circumstances, by request, we took charge of her. After some consideration, we came to a conclusion, (which we seldom arrive at,) that no means which the patient could bear, would promise a removal of the disease, which we had concluded must exist, save the constitutional effects of a mercurial. This course was instituted, with the addition of blisters to the neck and extremities. After steady use of these means, for ten days, (during which time all the symptoms remained stationary, except that the patient became still more reduced,) there began to be some tenderness of the gums and a little discharge of saliva. With the commencement of this effect, there commenced a gradual improvement of all the symptoms, so that the patient declared herself "decidedly improved." After the mercurial effect had been present some three days, there began to be some relish for light food; the patient could sleep most of the night, and felt much refreshed thereby. The pulse came down to 100, and was more expanded, speech and hearing more ready, and taste entirely natural. The strange sensation in the head had also gradually passed away. After nearly a week steady improvement, the patient, by her urgent importunities, was allowed to eat a supper of *stewed veal.* About midnight, I was summoned to my patient, found her with violent abdominal pain and tenderness, labored pulse, and great anxiety of countenance. After some fifteen hours of intense suffering from a

violent enteritis, she expired. Autopsy 16 hours after death. Present, Mr. Eastman, (a student of medicine,) and two practitioners. On opening the cranium, found no external indications of disease, other than a very small patch at the superior and posterior part of the head, (or in other words, where Phrenologists locate the organ of firmness,) where there had been inflammation in the arachnoid membrane, but which was evidently under the restorative process, and being occupied by small depositions of coagulable lymph. A circle of an inch in diameter, would have included the unhealthy part. The substance of the brain was healthy throughout. But upon approaching the base of the brain, the mystery was unravelled. A patch of an inch and a half in diameter, in the arachnoid membrane, covering that part of the cerebrum and cerebellum, which corresponds to the origin of the medulla ablongata, presented the same appearance, only in an increased degree, of the part before described, the centre of which patch, exactly corresponded to the origin of the eighth and ninth pairs of nerves. The lungs and heart were healthy. The bowels showed recent violent disease, produced by the ingesta before named, but no evidences of a disease of a sub-accute or chronic character were presented.

PART II.

REVIEWS AND NOTICES.

ART. V.—*Address to the Graduates of Geneva Medical College.* By CHARLES ALFRED LEE, M. D., Professor of General Pathology and Materia Medica in Geneva Medical College. 1847. pp. 23.

We have read Professor Lee's valedictory with much interest; and if the alumni adopt it as their rule of action in future life, they can not materially err. Our space will not admit of very copious extracts; but we will present several of its most prominent and interesting features. The author enters into a very just and vivid description of the moral responsibilities resting upon the medical profession; and after urging the necessity of being true to *itself*, the following sad but too just picture is presented:

But need I say, that the profession has not been thus true to itself—that it has too often been degraded to a mere trade—a mercantile occupation, a means of accumulating wealth, disregardful alike of the honor which it ought to preserve, and of the consequences resulting to the community? When we look abroad and see the disgraceful tricks and artifices employed to obtain business; the dishonorable attempts to undermine and destroy the reputation of others; the slanderous assaults upon the good name of a rival practitioner; can we wonder that confidence in our art is shaken, that the public takes us at our word, and prefers any, almost, of the Protean forms of empiricism, to the best directed efforts of the medical faculty? In vain shall we expostulate, or attempt to stem the torrent of quackery which now rolls over our whole country, like a mighty flood, carrying desolation and ruin in its path, unless we commence in earnest the work of reform, and diligently cultivate and cherish purer and nobler principles of action, and loftier and worthier motives and views of duty among ourselves.—*Page* 7.

Here is a picture which should make every highminded and conscientious physician shudder. And if he be a transgressor,

it is one which should haunt him spectre-like night and day. Every portion of our country is groaning under the blight of empiricism; not a city nor a town, a village nor a hamlet, but can boast the patronage of a quack. The rich, the gifted, the patriotic, the religious—the poor, the ignorant, the reckless,—all join in the same swelling throng. The divine in the pulpit and the reeling drunkard in the streets; the lawyer at the bar and the criminal in the box, each signs his name to the lying certificate! And why is this? Let our author answer. The profession *is not true to itself!* Too many seek to erect their own fame upon the prostration of another; and hence the disreputable schemes, and unprofessional tricks, which steep in ignominy, and degrade in the eye of the public, that profession which should remain even *above* suspicion.

Professional intercourse is often barred by this spirit of intrigue, deception, and piracy. Physicians are absolutely often *afraid* to call their cotemporary in consultation, under an apprehension that, by soft inuendoes, and half-smothered and whimpering sympathy, he may seek to gain a personal advantage. And then, when such attempts are made, what is the result? Criminations and recriminations speedily follow; and both are ruined in the estimation of the family. The next scene in the drama is, that a quack supersedes both; they are thus vanquished and the whole profession degraded.

What would be the result of a different course? Let physicians treat each other fairly, honestly, and equitably; let each regard the other as a *brother*, and be ever ready to defend and sustain him, and the quack would lose his chief support. This course of invidious criticism and secret censures is perfectly suicidal; and it is one of the strangest phenomena in the moral world, that such dissentions continue to be cherished when they are universally acknowledged to be unjust, degrading, and ruinous. Of course the whole profession is not charged with this delinquency; thanks to the noble spirits there are many exceptions; but the guilty are still too numerous for the prosperity of the profession.

The following extract contains sterling truth:

There is one duty which you owe to society, which you will not neglect, and that is to disseminate as widely as possible a knowledge of the laws and conditions of health; the great principles of hygiene on which the prosperity of towns and cities, and wide districts of our country, very materially depend. You can do much by conversation and lectures, to spread around you an acquaintance with the elements of popular Anatomy and Physiol-

ogy, and in this way strike a blow at the very root of the wide-spreading tree of quackery, which will wither it at its source.—*Page* 13.

Proportionally as the community becomes enlightened in the leading facts and principles of anatomy, physiology, hygiene, and even pathology and therapeutics, will they detest and discard the puerile dogmas of impudent and ignorant quacks. We have made some observation on this subject, and it is certainly rare to find an individual possessing rational views of the laws of life and health, who could be defrauded into a support of empiricism. Suppose, for illustration, we take the trouble to explain some of the laws of physiology, pathology or therapeutics; and then state in plain terms the pathology and therapeutics inculcated by Homœopaths—what would be the result? Just this—that the infinitesimal humbug, and the like-cures-like chimera, would be discarded as lies, and their authors as knaves. The people do not *desire* to be deceived, but they act in blind honesty; and if physicians would take the proper means to remove their ignorance, they would subserve their own interests and the cause of humanity. How much more easily and pleasantly can a physician practice in a family that appreciates his views and comprehends his prescriptions; in such a family he does not fear an ejection to make way for the quack; he knows they are enlightened and appreciate his services. And these are the patrons who are most grateful for the important aid of an enlightened physician.

The next paragraph relates to the general education of physicians:

An ignorance of orthography and grammatical construction in your own language is not to be admitted as even a supposable case; for it would argue a degree of ignorance scarcely to be found in the more advanced pupils of our ordinary district schools. It is justly expected that you have a general acquaintance with the different branches of natural science; with the fundamental principles of law; of moral and political philosophy; of natural and revealed religion; and with those collateral departments of medicine, which are more or less intimately associated with your profession. And most especially is it expected that you keep yourselves up to the existing *Status* of medical science in all its ramifications; anatomy and surgery; medical and surgical pathology; midwifery and practical medicine; materia medica and medical jurisprudence; for in this way only can you discharge your consciences, and have the satisfaction of feeling, that no available

means have been neglected for attaining the utmost possible success in the administration of your art.—*Page* 14.

What is more painful than to read a manuscript, written by a *physician*, and behold in every sentence violence done to the simplest rules of syntax and orthography? No man should be guilty of bad spelling in this land of dictionaries; outlandish and unreadable chirography is pardonable, but the misuse of words and letters can admit of no apology. If they cannot be used correctly, they should not be used at all. Were the archives of Medical Journalists thrown open, some unique specimens in this line might be collected.

But more especially, as the author observes, should medical men keep themselves up to the existing *Status* of the science. And yet it is true, that very many continually fall behind. Medical science is too often treaded as though it were *fixed;* unmindful, apparently, that, like all of the natural departments, it is undergoing constant changes and improvements; that old errors are daily pruned out, and new and important truths added; so that he who remains stationary, is soon lost in the distance. Many of the professional and non-professional portions of community, divide physicians into two classes—the *speculative* and the *practical.* The so-called speculative are those who read; those who take advantage of the experience and observations of the whole world; and thus add to their own observations the accumulated facts of every country, and thereby become familiar with every improvement. The practical class includes those who contemptuously discard books and rely upon their own unaided experience; they have no use for medical journals, and decline reading new books; they go their diurnal rounds, and prescribe the same remedies; what they did yesterday is done to-day, and the same will be done to-morrow. The great laws of physiology, pathology, and therapeutics are treated as fabulous tales and sneered at as false and deceptive; and those who are governed by them as *speculative doctors!* Now mark the difference. Those who do study as well as observe, administer medicines to fulfil definite and tangible indications; they prescribe a known therapeutical agent to cure a known pathological change: and if these points are obscure, they are governed accordingly, and refrain from active interference. Is *this* speculation! But the practical men see no necessity for this painful minutiæ; they are more comprehensive in their views, and find no difficulty in the most obscure cases. The law of experience, or rather *habit*, governs every prescription, and a

routine practice becomes the most facile thing imaginable. Is this *speculation?* It is worse—it is *guessing*. Those who thus practice administer medicine upon the principles of chance, and are rewarded accordingly.

We do not intend, by these admissions, to stigmatize the whole profession; for it is certainly true, that a spirit of inquiry is abroad; that the great principles of pathology are becoming a part of the enlightened physician's study; but there are too many exceptions; and to those we appeal for the sake of themselves and their cotemporaries. No man is justifiable in administering a dose of medicine, without understanding what it is to accomplish; and such knowledge can be gained only by a close, accurate, and systematic study of the laws of physiology, pathology and therapeutics. *Practical medicine* is nothing of itself; it is made up of these elementary component parts; and without them it is sheer empiricism.

The general principles glanced at in the preceding extract, are further illustrated in the following quotation:

Medicine is not, as many seem to suppose, a system of rules and doctrines handed down from teacher to pupil, admitting no change, a formulæ which you are bound to sustain, and from which it were heresy to swerve; but it is a progressive and constantly improving science, and every true and sincere votary of it will employ *all* the remedies, means and resources within his reach, which accident or science has discovered, and observation and experiment verified. Away, then, with your partial systems, which inevitably and professedly limit these means, and virtually nullify these resources.—*Page* 18.

The "partial systems" of medicine have always been the opprobrium of the profession. It is this *one-idea* philosophy which sustains every form of empiricism; it constitutes the *itch* of homœopathy, the *cold* of steam, the *heat* of chronothermalism. Nor is it limited here; the ruinous *systems* found in our own practice, proclaim the same crippled philosophy, and the same half-fledged doctrines. "Away, then, with partial doctrines"—give us those broad principles of eclectic philosophy, which shall burst the fetters of baseless systems, and which are bounded only by truth and reason.

We have space but for one more extract, but that contains a volume of truth:

If there is a sight calculated to excite pity mingled with disgust, it is to see medical men judging of each other with harshness and severity; thinking that by depressing others, they do so much to elevate themselves. I would urge you especially to

avoid such a course as this: respect the opinions of those who have, at least, had as good opportunities of acquiring medical knowledge as yourselves; cultivate their friendship; draw closer the bonds of catholic brotherhood; so will you be spared the miseries and vexations of party warfare, and enjoy your own respect, if not the respect of others.

By these remarks, I do not wish to be understood as saying that you are to deal tenderly with quacks and quackery; for as a woe was once denounced upon the Scribes and Pharisees, hypocrites, so there is a woe to be proclaimed in our day against empirics—the basest of all hypocrites and impostors. Our duty to the community—a regard to the greatest good of the greatest number, demands of us the exposure and denunciation of medical imposture and deception, whatever garb they may assume, or livery they may put on.—*Page 22.*

We make the admission with the deepest sorrow, that medical men *do* judge each other too harshly. Ours is called a *noble* and *benevolent* profession; and yet, lamentable to admit, physicians act less nobly, and exercise less benevolence toward each other, than any other class of men. Severe, unjust, and certainly uncalled for criticisms too often destroy the harmony of the profession, and secure the triumph of the quack. Would to God this condition of the profession admitted of a remedy. If physicians would discard that unnatural jealousy which rankles in the profession, and would exercise towards each other a reasonable degree of indulgence and brotherly kindness, most of the evils connected with our degraded condition, would be abrogated, and the interests of all, individually and collectively, proportionally advanced. Our motto should be *union, fidelity, and harmony.*

We heartily join with the author in the opinion, that we owe it as a duty to the public, no less than to our profession, to denounce and expose quackery. The silence of physicians in regard to quack systems, is not unfrequently construed into a tacit acknowledgment of their truth; and at least, such a course leaves the public uninstructed, and consequently an easy prey to the unprincipled impostor. True, such opposition should be conducted with prudence and moderation; but that it is the duty of physicians to take firm and decided ground on this subject, will hardly admit of a reasonable doubt.

ART. VI.—*New Elements of Operative Surgery.* By ALF. A. L. M. VELPEAU. Translated by P. S. TOWNSEND, M.D., late Physician to the Seaman's Retreat, Staten Island, New York. Under the supervision of, and with notes and observations, by VALENTINE MOTT, M.D., Professor, etc. In three volumes. Vol. III., with an Atlas. *New York:* S.S. & W. Wood. 1847. pp. 1162.

We are gratified to state that this ponderous work has at length been completed, and that it is now placed within the reach of every surgeon. But one opinion can be entertained, we presume, in relation to its merits; all must concede that it is a vast treasury of knowledge, which has no equal as a general treatise on surgery, in the English language.

To the *Translator* (Dr. Townsend) and the *Supervisor and Annotator*, (Prof. Mott,) the thanks of the profession are due for the zeal, industry, and ability which they have displayed in this great and laborious undertaking; and we doubt not, that a generous profession will award all the honor which so justly belong to those whose labors tend to advance the interests of a noble and benevolent science.

But notwithstanding the positive merits attached to the labors of the translator, we regret to add, that certain omissions and commissions not a little detract from his otherwise completely successful effort. In a notice of the preceding volume we pointed out some of these defects; among which were his fulsome eulogy of the illustrious Mott, certain faulty arrangements, and absolute injustice to eminent American surgeons. Moreover, the work has been permitted to swell to an unreasonable and uncalled for size, by copying, in *extenso*, the cases of Dr. Mott previously published in the periodicals. That in many respects the editor has committed grievous errors is too palpable to admit of denial, and indeed the blundering manner, and bad taste exhibited, will deter many a student and physician from entering upon its perusal; but thanks to the sterling merits of the original, it was not to be spoiled even by the most faulty taste, or the most injudicious acts.

That this view of the translator's labors is not exaggerated, is fully proven by the fact, that almost every medical journal in the United States has severely criticised these glaring defects; and, indeed, so universal has been the disgust at the course pursued, that nothing but the sterling character of the book itself has prevented an absolute denunciation. And yet,

in the midst of this general disapprobation as expressed by the journals throughout the country, the translator has had the imprudence to refer to them in his preface, under the contemptuous epithets of "*professed* notices and maudlin criticisms." This contempt for the opinions of the medical press, (and opinions almost or quite unanimously expressed,) will redound but little to the honor or interest of the writer, and still less to those portions of the work which have been deemed obnoxious.

We desire to repeat, however, that the elements of Velpeau, as now clothed, contain an immense mass of useful matter; that as a book of reference for the practical surgeon, it is of great value; and, indeed, is superior to any other in our language. But the idea of making it a *text-book* for students, is preposterous; its almost interminable details forbid such a hope. The price of the work (ten dollars including Atlas) is very low, and should induce every surgeon to purchase it. For sale in Lexington by C. Marshall.

ART. VII.—*Hand-book of Human Anatomy, General, Special, and Topographical.* Translated from the German of Dr. VON BEHR, and adapted to the use of the English Student, by JOHN BIRKETT, Fellow of the Royal College of Surgeons of England, and Demonstrator of Anatomy at Guy's Hospital. *Philadelphia:* Lindsay & Blakiston. 1847. pp. 487.

The plan of Dr. Von Behr's hand-book, embracing general, special, and topographical Anatomy, is a very excellent one, and will be found to facilitate the study of these several departments. It is probably true, in regard to very many students, that they acquire but a limited knowledge of *general anatomy;* and when the vast importance of this portion of the science to physiology and pathology is remembered, the defect must be regarded as one of an important character.

Another feature of some importance in the work, is the occasional references to physiology, pathology and surgery. Although it would be injudicious to intermix those several departments in too general a manner, yet they *do* bear certain relationships, which cannot be properly disregarded; and if some of these more prominent connections are occasionally presented to the student, he will ultimately acquire a more connected view of the whole, than were they entirely separated.

Dr. Von Behr has aimed to concentrate, in the smallest possible space, the largest possible amount of information; and it is strictly true, that he has so far succeeded, that the student will be instructed, in no very meager manner, in the several departments of General, Special, and Topographical Anatomy, and in many of their relations to physiology, pathology, and surgery. It is, therefore, to be regarded as something above the too meager manuals which are employed as labor-saving machines. It is, in truth, a valuable text book, and one that will advance the knowledge, while it saves the labor, of the student. It is printed in the usual handsome style of the enterprising publishers. For sale in Lexington, by C. Marshall.

ART. VIII.—*A Treatise on the Diseases of the Eye.* By WM. LAWRENCE, F. R. S., etc. New Edition. Edited, with numerous addition, and one hundred and seventy-six illustrations, by ISAAC HAYS, M. D., Surgeon to Wills' Hospital, etc. *Philadelphia:* Lea & Blanchard. 1847. pp. 859.

It is gratifying to perceive that this standard work on *Ophthalmology* has reached a new edition, and comes before the profession very considerably improved. The names of LAWRENCE and HAYS are sufficient to secure unlimited confidence in a work which receives their endorsement. The present edition has received an addition of eighty-one pages of new matter, and numerous pictorial illustrations. Commendation becomes unnecessary, where a work like this one, is superior to any other of its class, and is universally regarded as a standard. We cannot forbear to add, however, that the accomplished American Editor has, both by illustrations and new matter, very greatly increased the value of the original treatise. For sale by C. Marshall, Lexington.

PART III.

AMERICAN SUMMARY.

1. *Employment of Ice in the Treatment of Dysentery.* By Lewis Shanks, M. D., Memphis.—(*N. Orleans Med. & Surg. Jour.*)—The author gives several cases in detail, presenting the ordinary symptoms of dysentery in its worst forms, in the treatment of which, he made a free use of ice, both internally and externally, with the happiest effect. Ice was rubbed over the entire body; the surface immediately dried and well chaffed with coarse towels. This application of ice was frequently repeated, and continued for several days, until reaction was brought about, the capillary circulation and heat of the surface restored, &c., the patient allowed at the same time to eat as much ice as he desired.

It is proper to add, that morphine, acetate of lead, blisters, and hot fomentations to the bowels, together with injections, and occasionally the lancet, were used in the course of the treatment.

2. *Cold Water in Over Doses of Opium.* By F. H. Petit, M. D., Moira, N. Y.—(*Boston Med. & Surg. Jour.*)—Dr. Petit relates several cases, with the usual, but alarming symptoms of the narcotic effects of opium in over doses, which he treated successfully by the continued pouring of cold water upon the head, after having evacuated the stomach, when this could be done. At the same time making hot applications to the bowels, with sinapisms, and stimulating frictions to the extremities.

He remarks, "I consider the success owing to the thorough application of the water to the head, thereby prolonging the powers of life, until the suspension of the narcotic effects of the drug."

3. *Medical Biographies.*—Several members of the profession have recently died holding positions in society that were

gained by efforts of no every day kind; and if sketches of their active lives could be furnished, both profit and pleasure would be derived from tracing the footsteps of those who lived in honor and died regretted. The French do more for the memory of those who have been useful in the community, than any other modern nation. They pronounce eulogies over their remains, and hold up the virtues, and all the useful characteristic qualities of the dead, to the admiration of the people. Here, there is a culpable slackness in doing what may sometimes be overdone in that country. Why should not medical readers have some account of them? The example of a good man and successful physician, should not be lost with his death.—*Boston Med. & Surg. Jour.*

---

4. *Spina Bifida Cured, by Excision.*—By A. G. PURDY, Eaton, N. York.—(*Annalist.*)—The patient was a girl about six years old. The tumor situated over and between the two upper lumber vertebræ, was about as large as an orange, having a neck about an inch in diameter. Ulceration had commenced. The integuments were carefully divided around the neck of the tumor, and then the sack divided nearly on a level with the spinal cord; which could be distinctly seen owing to a deficiency of one of the spinous processes. From one to two ounces of watery fluid escaped, on making the incision. The wound readily healed, with the exception of a small orifice, through which there was a constant stillicidium for a number of weeks. There was paralysis of one leg, from which, however, she finally recovered.

---

5. *Strychnine in Chronic Bronchitis.*—Dr. P. H. CLARK reports several cases in the *Ill. & Ind. Med. Jour.* of chronic bronchitis, some of which were certainly grave cases, which he treated successfully with strychnine. He prefers the powder suspended in mucilage, or made into pills, to the tincture. The usual dose was from one twentieth to one fifth of a grain, and in this way continued for several weeks, without any ill effects, except in one case, which was very slight. He premises where there is determination of blood to the head, it is necessary to deplete until it is removed, before using the strychnine. He also reports a case of phthisis pulmonalis, which he thinks was mainly cured by the use of this article; and adds: "In bronchial affections, and even in the forming stages of phthisis I have the most implicit confidence in it, and

think the time is not far distant when pulmonary consumption shall be striped of its manifold terrors, by the sanitary influence of this powerful remedial agent." We fear the Doctor's anticipations will not be realized. It is an article that should be used with the utmost caution.

---

6. *Bifid Vagina.*—Professor Dickson of Charleston, (*South. Jour. Med. & Phar.*) gives the following cases: Mrs. —— has been two years married, and has always suffered from irregular and scanty menstruation. The vagina is divided obliquely, by a membranous partition. Both tubes are long and narrow—coition difficult. The left, which is obliquely posterior, leads to the uterus, the os tincæ presenting: the right conducts to the side of the uterus in which the membranous partition loses itself; the cul de sac is not to be reached by the finger; a long probe or bougie may pass up six inches or more, but gives pain. The dividing membrane lies in loose folds; is smooth and well lubricated, and projects slightly between the labia. It possesses very little sensibility.

---

7. *Obliteration of the Vagina.*—(*Ibid.*)—Three cases are related. The first, was ninety years old when he saw her. She had stone in the bladder, which was removed without operation.

The second was an old lady also, often attacked by suppression of urine, but free from any calculous deposit. The labia had in this, as in the preceding case united so perfectly, that there was not left any trace of a vulva, except a mere elevated ridge—a sort of raphe. The opening which communicated with the bladder only admitted a probe, or very small bougie. She had suffered from difficult labor, in which the parts had undergone much injury, from unskillful hands, followed by long and severe inflammation.

The third was a most unfortunate instance, resulting in a beautiful young married woman, from inflammation of the womb and its appendages, after a protracted first labor. The obstruction in this case was about an inch and a half within the vagina, and was exceedingly firm and unyielding to the touch, seeming fibro-cartilaginous.

---

8. *Hydrophobia; post mortem appearances.*—(*Ibid.*)—The membranes of the brain were much injected, while the cerebral substance had undergone almost no change in appearance. There was nothing of morbid alteration discoverable in the

viscera of the thorax or abdomen. There was well-marked sub-cutaneous inflammation beneath and around the scars on the arm, left by the bite from which he suffered.

9. *Extraction of Urinary Calculus from the Female.*—Dr. Branch of Abbeville, publishes an account in the same journal, of the extraction of a stone an inch and a quarter in diameter from a female per urethra. The urethra was dilated by introducing bougies, varying in size from three-eighths to an inch. He then bent the blades of a common pair of scissor forceps, so as to have them press hardest at the extreme point; then introduced them through the urethra into the bladder, grasped the stone without much difficulty, and gradually withdrew it. Within twenty-four hours the urethra had regained its proper tone and calibre.

10. *Regulations in the Indiana Medical College.*—By the by-laws of this institution, candidates after having passed a satisfactory examination, are required to publicly assent to the following promise before the degree is conferred: "You do solemnly promise that you will, to the utmost of your abilities, exert your influence for promoting the welfare and respectability of the profession: That you will demean yourselves honorably in the practice thereof: That you will not put forth any nostrum or secret method of cure, and that you will not publish any matter or thing derogatory of the profession."

11. *Paregoric and Port Wine in Consumption.*—The Editor of the *St. Louis Med. & Surg. Jour.*, in an article on phthisis pulmonalis gives a case successfully treated with paregoric and port wine, in which he says "all the signs and symptoms of advanced phthisis were present," and adds, "After all, why should not paregoric and port wine be as efficacious in the treatment of consumption as any other remedies? They are well known, and old fashioned articles, it is true, and most of us are in the habit of seeking for something new and untried in these deplorable cases. The arguments in favor of this simple treatment, are more numerous and strong, than any that can be adduced for the new remedies. The paregoric stays the exhausting diarrhœa, and allays the troublesome cough; the wine excites the appetite and stimulates and sustains the digestive process; and thus contributes to the improvement of the blood, and the hidden chemistry of nutri-

tion. Our prescription will be for the next cases at least, paregoric, port wine, a liberal diet, and a blister to the chest.

12. *Surgical Case at Monterey.*—By Dr. N. S. Jarvis, Surg. U. S. Army.—(*N. Y. Jour. of Med.*)—The first annoyance which we experienced, and which no doubt exerted an injurious effect, was one little anticipated at the time. The moment a limb was amputated, numerous flies would light on the stump, and must have deposited their eggs, for when it became necessary to dress the stump, myriads of maggots were found buried in it, which could be expelled with great difficulty; rendering it necessary in some instances to re-open the flap, for their complete extermination. But a much more formidable enemy made its appearance in an erysipelatous inflammation of the integuments, covering the stump, which generally set in two or three days after the operation; and notwithstanding all the means to arrest it, most commonly ended in sloughing, and either proved fatal, or rendered a second amputation necessary. That some influence existed previously, either external or internal, from some cause connected with the state of the atmosphere, or habits of men, arising from diet or water, was manifest. The slightest wound or scratch became in every case a tedious ulcer; in some instances proving a cause for serious alarm. Apparently the most trifling wounds require an unusual time for healing, and even those that had previously healed would break out again, and present greater difficulty in their cure than in the first instance.

13. *Gun-shot Wound.*—(*Ibid.*)—Lieut. G——, 4th Infantry, was wounded in three places about the same time, on the morning of the 21st of September. The most severe wound, however, was one, in which the ball, striking the upper and anterior portion of the thigh, entered the pelvis, wounded the fundus of the bladder, and passed out at the sacro-ischiatic notch. The femoral vessels, in the course of the ball, escaped being wounded in a most remarkable manner. The urine passing freely through the wound necessarily produced considerable infiltration and inflammation of the cellular tissue of the thigh. By changing his position so as to lie on the left side, and introducing a catheter, which was constantly maintained in the bladder, no more urine escaped through the wound, and the inflammation rapdly subsided. No unfavorable symptoms followed. The

usual separation of the parts destroyed in the course of the ball, took place, succeeded by a healthy suppuration, at the usual period of gun-shot wounds, and a hope was entertained by his friends of his speedy recovery. This hope was still more strengthened, when, on the tenth day after the wound was received, the catheter, by some accident, became obstructed, and remained so some time before it was discovered, and on its withdrawal, and re-insertion, upwards of *twelve ounces* of urine was drawn off, showing conclusively that the wound in the bladder must have entirely closed, to enable it thus to retain so large a quantity of fluid. The expression of his countenance, and cheerfulness of manner, would have hardly indicated any great pain or suffering. It was only on the twentieth day that any alarm was excited in the minds of his friends, by his suddenly being attacked by rigors, followed by fever and profuse night-sweats, notwithstanding all the means made use of, rapidly reduced his strength, and he expired on the night of the 13th October, and on the *twenty-second* day after being wounded. A post-mortem examination of this case would have proved highly interesting, showing how far wounds of this description, affecting internal hollow organs, may heal, andthe manner in which a restoration of the parts destroyed, takes place; but the pressure of professional duties at the time, has prevented so desirable a finish to the history of the case.

---

14. *Amputations at Monterey.*—(*Ibid.*)—The total number in the three divisions of the army, was *twenty-eight*, viz: *ten* in the first division, *four* in the second; and *fourteen* in the third, or volunteer division. *Twenty* were performed on the field, or on the following morning in the camp; the remaining *eight* at subsequent periods, varying from five to twenty days. *Twelve* of the number, including *two* taken prisoners, and operated on by the Mexican Surgeons, proved fatal, and the remaining *sixteen* recovered. This average of mortality was not confined to our wounded. I was told by Dr. Hidalgo, surgeon in charge of the Mexican military hospital, that of *thirteen* amputations performed there, *six* had proved unsuccessful.

Of the two cases of amputation of the thigh, performed by the Mexican Surgeons, on the two prisoners taken by them, one was operated upon on the same day of the injury, and the other four or five days after. Neither stump, on examination, after the removal of the dressings presented any unusual

appearance; on the contrary, the flaps had been neatly adjusted and brought together, and kept so by a number of interrupted sutures, and adhesive straps, encircling it in every direction, and adhesion had apparently taken place, in one case along the line of divided integuments. No one judging by the external appearance of the wound, if we except a degree of paleness of the integuments of the flap, and some fœtor, would have suspected the position and extent of disease within. On dressing the first case, and removing the lint and adhesive stays, which had become somewhat offensive, the edges of the flap receded or partially separated, so as to reveal a large cavity or excavation, the whole surface of which was dark and ill-conditioned, and from the centre projected the end of the bone. There were no signs or appearances of suppuration or granulation having ever taken place, in the divided muscles; on the contrary, they appeared absorbed or attenuated by previous discharge, of which none existed at this time. The patient rapidly sunk, and died on the fourth day after his admission into the Division hospital.

Private Alexander, of the Baltimore Battalion, the other case, was brought to our hospital some days after the one above. His stump presented nearly the same appearance as the first, with no indications whatever of the diseased condition within. Eleven days after his admission, the flap gave way, disclosing the same appearance as in the former case, with most intolerable fœtor. Gangrene rapidly extended, and he died on the *twelfth* day after his admission, and the *thirteenth* from the time of the operation.

---

15. *Wound of the Lung.*—By George Johnson, M. D., late Surgeon in the U. S. Army.—(*St. Louis Med. & Surg. Jour.*) Two men, previously good friends, had been drinking together, when an altercation ensued, and one of them drew a large Bowie knife, and plunged it into the breast of the other. I reached the wounded man at the same moment with the surgeon of his regiment. On examination, we found a piece of the lung, two and a half, or three inches in length, protruding from the wound, which was about an inch below the left nipple—the knife passing between the ribs, downwards and outwards. The wound was at least three inches in length. After consultation, we concluded to introduce the wounded portion of lung, within the throax, and to close the external wound with the interrupted suture. The man was kept upon the most strict antiphlogistic treatment, and some twelve or

fifteen days after, when I last saw him, there was every reason to believe that he would entirely recover. The knife with which this wound was given, was two inches wide, and it must have penetrated the lung four inches. On reflection I am not convinced that our practice in this case was the best that could have been adopted. The wounded portion of lung had only an attachment of three-fourths of an inch, and would it not have been better surgery to have clipped it off, than to have replaced it within the cavity of the chest?

---

16. *Gun-shot Wound.*—(*Ibid.*)—A man was shot in the left axillæ, with a musket ball; the man who fired the gun being immediately opposite, and about one hundred and twenty yards distant. Being absent from camp I did not see the wounded man until the evening of the second day after the accident. On examination I could find no signs of the ball. The man was laboring under distressing dyspnœa. I learned that he had expectorated freely, when first shot, but now his cough was suppressed and he could not expectorate at all. The left cavity of the chest seemed to be half full of blood, and on raising the man and turning him on the left side, at least half a pint of blood escaped through the wound. The following day he was bled twice, and the treatment was strictly antiphlogistic. About a week after, the track of the ball was plainly to be seen. After passing through the chest, it made its exit half way, and just below the spine of the scalpula; thence glancing inwards and downwards, lodged near the spinous process of the twelfth dorsal vertebra, where I extracted it. Beattie, the man whose wound I have just been describing, lives in this city. Prior to the accident he was a robust and healthy man, but he has now become thin and wan, and is frequently troubled with a cough.

---

17. *Discoveries in* 1846.—The year 1846, it is said, will be memorable through all time for four great discoveries, viz: 1st. The inhalation of ether, 2d. a substitute for gunpowder, 3d. the application of electricity to the smelting of metals, and 4th. an improvement in the propelling of sea vessels.

PART IV.

FOREIGN SUMMARY.

18. *Treatment of Rheumatic Inflammation of the Eye.*—(*Med. Chir. Rev.*)—Mr. Jones describes rheumatic inflammation of the eye under two separate heads, those of sclerotitis and rheumatic iritis. The former, he states, may, in its incipient stages, be sometimes checked by a dose of calomel and Dover's powder, with a pediluvium at night and an aperient in the morning, following these up with small doses of nitre. If this is not successful, bleeding as also in rheumatic iritis, must be resorted to. In ordinary inflammation of the iris and other structures of the eye, Dr. Jacob is an advocate for more cautious depletion than that usually employed, believing that the most destructive effects often occur after comparatively slight inflammation, and in the less robust subjects. "After many years experience, I find myself treating inflammation of the eye without much bleeding, and I do not think my success is less than that of practitioners who resort principally to the lancet and leeches." Bleeding is useful only at the very commencement, and should not be resorted to for the removal of the mere redness of a later period. If in ordinary inflammation this practitioner considers a modification of the usual practice desirable, he does so still more in reference to those cases connected with the rheumatic diathesis, in which depletion should, save in the robust and plethoric, be only local. Both Mr. Jones and Mr. Jacob recommend repeated doses of Dover's powder, and diaphoretic doses of tartar-emetic, occasional purgatives, as sulphate of magnesia with the carbonate, calomel and colocynth, &c. In severe cases *mercury* is required and should be combined with antimony and opium; but the same reliance is not to be placed upon this mineral as in the simple or syphilitic form of the disease. Upon the utility of *colchicum* much discrepancy of opinion prevails, and Dr. Jacob speaks somewhat doubtingly upon the subject. From *cinchona*, in debility and decayed health caused by active

treatment, and in examples of frequent relapse, like most practitioners, he has derived great advantage. In those of chronic and refractory cases, too, the *iodide of potassium* is given with bark, mercury, &c., as the case may be, with benefit. The ammoniated tincture of *guaiacum*, given in milk, is another useful remedy. Belladonna should be used both as a fomentation (3j. Ext. ad ß j. Dec. Papav.) for the relief of pain, and as a means of maintaining the pupil dilated. Blisters are often beneficial; and, in the latter stages, the *vinum opii* dropped in the eye, affords much relief where there is a scalding pain, intolerance of light, and lachrymation.

---

19. *Young Physic.*—(*Ibid.*)—Dr. Mayo remarks: "There is something very attractive at first sight in the prostration of scientific interference before natural laws. But it is not justified by the history of the laws of *disease*, in the extent to which it is recommended. That history and those laws must in fact be attentively perused and excogitated, as the plans of an enemy are studied, and with the same intention; namely, with a view to obviate them or prevent their development. The doctrines of non-interference may gain a temporary sway through the talents of their supporters, but this truth, habitually familiar to the English mind, will afterwards recur in full force, and 'Young Physic' will rise from a temporary suspension of active measures to a more heroic use than ever of calomel and the lancet."

---

20. *Arteritis.*—(*Ibid.*)—The *symptoms*, most truly indicative of Arteritis, are those which denote a more or less complete obstruction to the course of the red blood along the course of the vessel or vessels. Thus, when the disease occurs in any of the extremities, the limb becomes chilly and benumbed, and eventually mortifies. This morbid condition is not unfrequently met with in aged people; hence the term *gangrena senilis*, that has been usually applied to it. It is not, however, confined to old age. Most writers have affirmed that severe pain along the course of the affected artery is very generally present in this species of arteritis. But this is far from being a constant symptom. M. Bouillaud attributes it, when present, to irritation of the nervous filaments which accompany certain arteries, especially those of the extremities. It is not present in inflammations of internal and other arteries which are not provided with sensory nerves.

21. *Inhalation of Ether.*—(*Med. News.*)—*L'Union Médicale* (13 March) informs its readers that the Council of Health of Zurich has issued an order prohibiting the use of ether vapour by those who practice dentistry, bleeding, and other minor surgical operations. This prohibition has been issued in consequence of certain accidents having arisen from the use of ether vapour by inexperienced persons.

---

22. *Inhalation of Muriatic Ether.*—(*Ibid.*)—Mr. Flourens states that the muriatic ether has yielded in his experiments on etherial ebriety as decisive and more prompt effects than sulphuric ether.

---

23. *Exhibition of Assafœtida during Pregnancy.*—(*Ibid.*)—Dr. G. Laferla, of Malta, recommends strongly this substance in doses gradually increasing from two grains to ℈j daily for the purpose of preventing the death of the fœtus *in utero*. The cases which Dr. Laferla particularly points out are those in which before labour the fœtus ceases to live without any appreciable cause—a circumstance which sometimes shows itself in several successive gestations. Dr. Laferla reports several cases in which the patient had two, three, and four times been delivered of still-born children, and afterwards under the influence of assafœtida, gave births to living infants.

---

24. *The Physiological effects of Sulphuric Ether, administered by friction on the mouth and fauces.*—M. Ducros has addressed a memoir to the Académie des Sciences on this subject. The following are his conclusions: 1. Sulphuric ether, employed in frictions on the mouth and fauces, causes, in gallinaceous animals, instantaneous sleep, characterized by closing of the eyes, and setting up (*hissement*) of the feathers. 2. If morphia, acetate of morphia, or extract of opium, be given during this sleep, the sleep, instead of being augmented, is instantly destroyed;—whence M. Ducros concludes, that, in the gallinaceæ, opiates are the antidotes of sulphuric ether. 3. If ether be given in poisoning by opium, the symptoms of poisoning are increased. 4. The soporiferous effects of ether thus administered to fowls, are also manifested in other animals and in man. In cases af hypochendriasis attended with want of sleep, with wandering pains in the chest and abdomen, sulphuric ether employed in frictious on the tongue, velum pendulum, tonsils, and back of the pharynx, procures an agreea-

ble sleep and calms the pains, and especially possesses these advantages in the midst of nervous excitement, when narcotics only tend to augment the general irritability. 6. In the convulsions of pregnant or child-bearing women, in the convulsions of the newly born, in hysterical attacks, in epileptiform paroxysms complicated with trismus, setting of the teeth, and spasm of the œsophagus, where swallowing is impracticle, if the cavity of the mouth and pharynx be rubbed by means of a camel's-hair pencil dipped in sulphuric ether, the nervous attacks, which by long duration, might prove fatal, may generally be arrested.

25. *Inhalation of Ether.—Some of the results.*—Since the issue of our last number, numerous statements have appeared, detailing the good and evil effects of Ethereal inhalations; the following are some of the results:

The Editor of the *London Medical Gazette*, holds the following language:

Great excitement of the nervous system, sometimes approaching to apoplexy,—an asthmatic condition of the respiratory organs,—spitting of blood, syncope,—are among the results which have been observed; but these are by no means the worst. In many instances, we are already aware of six or seven; death has followed quickly upon operations so performed. It may be that in some of these cases, death would have resulted, even had the ether not been inhaled; but, as far as we have been informed, several of the deaths have occurred under circumstances which are not observed under ordinary operations. It is to be regretted that the same alacrity is not shown in furnishing journals or newspapers with these fatal cases, as with the "dexterous operations." We are sorry to say it, but we believe it to be the fact, that none of these cases, with the exception of that reported by Mr. Nunn, have been recorded in this country.

26. *Fatal Effects of Ether.*—Inquest.—(*Ibid.*)—An inquest has been held on a young woman, the wife of a hair-dresser, at Spittlegate, in the county of Lincolnshire, from whom a tumor had been removed, while under the influence of ether. She never rallied, and died without the slightest reaction having taken place, sixteen hours after the operation. The following verdict has been returned:—"That the deceased, Ann Parkinson, died from the effects of the vapour of ether, inhaled by her for the purpose of alleviating pain during the

removal of a tumor from the left thigh, and not from the effect of the operation, or from any other cause." The surgeon who performed the operation stated that he fully concurred in the verdict, as he had no doubt whatever that the ether alone was the cause of death, and it was a duty he owed to the public to say so.

---

27. *Fatal Effects of Ether in a case of Lithotomy.*—This case occurred to Mr. NUNN, Esq., Surgeon to the Colchester and Essex Hospital, Eng. The patient sank in a few hours after the operation, which Mr. Nunn unhesitatingly ascribes to the effects of the Ether. Here follows the post-mortem appearances, together with some comments:

Post-morten, (67 hours after death.)—Membranous congestion of the brain, but no effusion; brain firm; lungs permeable throughout, anteriorly ex-sanguineous, posteriorly engorged; heart flaccid, of a natural size and nearly empty; the left kidney pale; the right slightly congested. The bladder and the adjoining parts presented the usual aspect after an operation.

I would mention that the blood throughout the whole vascular system, was in a perfectly fluid state.

It is not my intention or inclination to attribute the loss of my patient wholly to the influence of the ether, which was administered in this case, nor hastily to decry its use under all circumstances connected with surgical operations; but still I feel called upon to bring before the notice of my medical brethren, the effects which resulted from its exhibition in this instance, that the profession may judge, from the recital of an unsuccessful case, how far it may be considered safe to employ ether generally as a means of preventing the pain otherwise inseparable from the physical lesion. The suffused eye, livid lips, and stertorous breathing, accompanied, first, by convulsive struggles, and next by a sudden cessation of all motion, are often indicative of the effects of the vapour; and these were not altogether absent in the present instance; still, I feel myself justified in employing it, from the published accounts of many successful cases, and the sanction of my colleagues and numerous friends around me. In prosecuting the operation, there was nothing peculiar to attract my attention, or to lead me to consider the patient's physical condition different from that of those on whom I had before operated, until I had reached the bladder, when I can but attribute the difficulty in seizing the stone, to the apparently collapsed state of that viscus which had fallen in folds over the calcu-

lus, and so prevented its being grasped by the forceps. I must not, however, omit to mention the fact that the patient expressed no signs of suffering during the operation. Thus far, therefore, it may be said the ether fulfilled its intended office; but I think another question is involved, viz: whether the artificial means thus employed may not produce very serious depressing effects on the nervous system, depriving a patient of that reactive power so necessary to the reparative process. Has not a patient, after the administration of ether, a double shock to overcome—that produced by the vapour superadded to that of the operation itself? Does not the history of the postmortem examination bear out the suspicion of the depressing influence of this inhalation?—*positively*, from the still fluid state of the blood (although the body was not opened for 67 hours after death,) and from the flaccid state of the heart; *negatively*, from the fact that the inspection detected no indications of violence done to the parts that could explain the rapid dissolution which ensued, and that *there was no evidence of nature having made the slightest effort towards local reparation.* Pain is doubtless our great safeguard under ordinary circumstances; but for it we should be hourly falling into danger; and I am inclined to believe that pain should be considered as a healthy indication, and an *essential* concomitant with surgical operations, and that it is amply compensated by the effects it produces on the system as the natural incentive to reparative action.

I trust that the publication of this unsuccessful case may lead to the publication of many others which have occurred, so that the profession may not be led away by the erroneous supposition that the prevention of pain is so vital a desideratum in operative surgery.

---

28. *Effects of Ether.*—The *Monthly Jour. Med.*, Edinburgh, says:

During the past month Etherization has been extensively practised, but few novelties have been published with respect to it. Its advantages and applications are still debated at the meetings of the Academy of Natural Science and the Academy of Medicine in Paris. We observe, however, that the cases noticed in our last number have produced an effect on the warmest advocates of inhalation. Even MM. Velpeau and Roux, though still maintaining its great advantages, now speak of the necessity of caution in its use. This is as it should be.

The third case to which we alluded, as likely to be fatal *after* the use of ether, in the Royal Infirmary has since expired. It was a case of tibio-tarsal amputation, under the care of Mr. Syme. A girl, aged 14, of good general health, was affected with caries of the tarsal bones, and fistulous openings leading from them. The amputation was performed in the usual manner on the 24th of February, without the slighest pain, the ether having produced its full effect. She died April 5. On dissection the blood was found unusually fluid, and secondary purulent deposits existed in the lungs, left kidney, right knees and left hip joint. Such are the *facts*. As to whether death in this, or the other two Infirmary cases, resulted from the etherization, that is a matter of *opinion*. Some say no, others say yes. It is the first fatal case of tarsal amputation which has occurred in Mr. Syme's practice, and it is only right to state that in his opinion it is attributable to the ether. The observation of other cases will sooner or later decide the point.

---

29. *Effects of Ether in Parturition.*—(*Med. News.*)—The following extract of a letter to the editor of the *Provincial Med. and Surg. Journal* dated Paris, Feb. 25th, will be read with interest:

"The mind of the profession here, is entirely occupied upon the ether question, to the temporary exclusion of all others. The Baron Dubois read a very interesting paper to the Academy of Medicine the day before yesterday, giving the details of six cases, of protracted and difficult labours, in which the vapour of sulphuric ether was inhaled with marked advantage. The particulars will be almost immediately published, but in the interim I may as well tell you that the results of the Baron's experience warrant him in concluding that the vapour of the ether may be inhaled by parturient women;—1st, without any danger to mother or child; 2d, with advantage to both, insomuch, that it destroys all resistance in the voluntary muscles of the perineum, relaxing, or rather paralyzing them for the moment, without impeding or interfering in the slighest degree with the natural physiological muscular actions of the uterus. The Baron has also observed that the abdominal muscles in their actions in parturition are not at all affected by the inhaled ether.

"The two first cases—both instrumental—one in labour forty hours, the other thirty-six, before the ether was inhaled, turned out ultimately unfortunate, as both patients died of

puerperal fever which was at the time prevailing in the hospital, (La Maternité.) This sad result the Baron does not think can be ascribed at all to the use of the vapour; nor does he on the other hand attribute the immunity of the other patients in the same hospital to it.

"The Baron, upon interrogating the patients after delivery, as to their sensations during the operation, was informed by all but one, that they felt noting of what was doing, but that one smiled, and would not say what she felt. It afterwards turned out that this patient, by her confessions to the nurse, was ashamed to say what she felt and thought; as she found herself *engaged*, all the time whilst under the influence of the ether, and undergoing the operation of delivery, *with her husband*, in that preliminary process which is so essential to the bringing about of that condition in which ladies like to be who love their lords."

---

30. *Observations on the condition of Asphyxia, or Insensibility, induced by the inhalation of ether; and of the indications to be fulfilled in the Treatment of the Effects of its Maladministration.* By CHARLES SEARLE, M. D., M.R.C.S.E., of Bath.—(*Med. Examiner.*)—In the Medical Times of the 19th ult., is a report, made to the Académie à Paris, by M. Amussat, of his experminents on animals under the influence of the vapor of ether, in which he said:—"that, during the condition of insensibility induced by the ethereal inhalation, the blood in the arteries was found to be of the venous character, and resumed its florid appearance when the state of unconsciousness had ceased. And, that, in animals which had died during the inhalation, the blood was found of the same venous color in the heart, veins, and arteries." If such are the results of M. Amussat's experiments, they establish, beyond doubt, the correctness of my views on the subject, published in the Medical Times, under date of Jan. 5, to the effect that the condition of the patient under the influence of the ethereal vapor is that of asphyxia; and that the sedative or narcotic effects of ether as ordinarily administered is of the same character. Its stimulant operation when so administered, that is, by the stomach, I must, however, first explain, or the views I entertain of its inhalation will not be rightly apprehended. To make this understood, it is necessary for me first to observe that life, the attributes of which are heat and motion, is the result of the chemical action developed in the animal system by the agency of the oxygen of the air inspired

in its combination with the hydro-carbonaceous constituents of the food existing in the blood—caloric and electricity, the actuating stimuli of all vital phenomena, being evolved in the process of chemical combination and electrical evolution, we may justly infer, takes place more particularly in the capillary or hair-like vessels, wherein the particles of the blood are brought into the closest approximation, and in which the final changes in its composition in relation, at least, to the conversion of arterial into venous blood takes place, hence the excitement of these vessels and motion of the blood in the capillary vessels, or organic life of animals; capillary action being the first visible motion to be discerned in the egg in the process of incubation, and the last to be discovered in animals when death takes place. These views r submitted to the profession as long back as 1830, when I had the honor of reading to the Westminster Medical Society a paper on the subject, and have since enlarged upon a work recently published, entitled "The Philosophy of Life, Health, and Disease."

Now, the transitory stimulating effects of ether, when received into the blood from the stomach, is in virtue of its composition, it being a compound of carbon and hydrogen; its absolute composition is carbon, hydrogen, and oxygen; but the latter, it is presumed, exists in combination with its equivalent of hydrogen in the character of water—that it virtually is, as I say, a hydro-carbon. This, then, we may fairly presume, from its highly inflammable nature, must exist in a looser state of combination, or a condition of greater affinity for oxygen, than that of the hydro-carbonaceous constituents of the blood, and would, therefore, when received into the general circulation from the stomach by predilection of affinity, enter immediately into combination with the oxygen of the blood, and a more active combustion, and, by consequence, excitement of the capillaries of the general system, would ensue; and thus the stimulating qualities of ether, in common with other hydro-carbonaceous alcoholic fluilds which operate in like manner. And hence Mr. Spalding, the celebrated submarine operator, found that, when he drank alcoholic beverage, he required a greater amount of air being supplied to him during his operations. But the stimulating qualities of ether are of a very transitory nature, these effects being soon followed by its opposite condition of narcotism; but before I proceed with these, its effects, as ordinarily administered, I must explain that of the insensibility induced by its inhalation.

The offices of respiration, are, the exhalation of carbonic

acid gas, and the reception into the blood of its equivalent of oxygen. Now, in the ethereal inhalation, as the air of the lungs presented to the blood for absorption is not only diluted with this vapor, but in admixture also with this hydrocarbonaceous compound, the latter, when imbibed from the air-cells in admixture with the air, from its greater affinity for oxygen than the constituents of the blood, immediately seizes upon the oxygen, and, combining therewith, thus deoxidates the blood in the lungs, whereby the blood, thence returned to the heart for general circulation, is deprived of its vitalizing qualifications; and hence defective capillary excitement of the heart and brain, and of all the functions, and thus the condition of insensibility and asphyxia induced: limited, of course, by the extent and period of the inhalation; but involving, necessarily, caution that it is not carried to too great an extent, considering that it virtually consists in a species of burking.

We may now comprehend the narcotic and sedative influence of ether which so soon succeeds to its use when received into the blood from the stomach. It having, as I have already explained, by its union with the oxygen of the blood in the general circulation, produced a certain amount of excitement, other portions of the ether existing in the blood, in their circulation through the lungs, enter into combination with the oxygen of the air imbibed, and here de-oxidating the blood at the expense of the general system, produce effects, though less in degree, yet analogous in kind, to its inhalation—narcotism; and thus its sedative influence and reducing power. And thus are all the operations of ether, I am of opinion, very satisfactorily accounted for, and established as such, I think I may venture to say, by the experiments adduced of M. Amussat.

Reverting to a former observation, I may be permitted to add, that precisely in character with the operation of ether, in producing both excitement and asphyxia, are the effects of alcohol, though modified in description by the difference that exists between them: alcohol being soluble in water, and mixable with the blood; and ether not so, but much more volatile and combustible. Alcohol is accordingly much more permanently stimulant in its effects, and only asphyxiating when received into the system in a concentrated form, or where the quantity in a more diluted state has been so considerable that the blood in its passage through the lungs has become incapacitated for transmitting oxygen for the purposes

of the general system; that is to say, the amount of alcohol present in the vital stream de-oxidates the blood in the lungs before it is returned to the heart for general circulation; and hence the more enduring condition of insensibility which succeeds intoxication, the whole vital stream abounding with its polluting influence.

If the explanation afforded be considered the true one, the circumstances prohibiting its use are obviously those of feeble power, as well as apoplectic predisposition, as the effect of all narcotics and reducing agents on the system is to produce venous congestion; and, from reasons afforded in my work "On the Philosophy of Life," but too lengthy in description to be here adduced, and more especially manifested in the liver and brain; hence there was found, on examination, in the case of death recorded from ethereal inhalation, congestive fulness of the blood-vessels of the brain; and, moreover, that bleeding was found useful in the recovery of dogs which had been rendered apparently dead by its use, as so stated in France. But the most obvious and direct indication to be fulfilled, in the case of its maladministration, is the re-excitement of capillary action by the inhalation of oxygen gas; subsidiary to this, or when this is not immediately available, judicious blood-letting is the next object, followed by the excitement of the skin, and respiratory function of the lungs, by the sudden splash of cold water, followed by galvanism and artificial respiration in extreme cases. And, as an internal stimulant, ammonia, alcoholic fluids, or agents of the like character, being interdicted, nitric acid might prove more useful in these cases than ammonia. In India I once drank an entire drachm in a tumbler of water, and with, I thought soon after, decided exhilarating effects. In addition to these means, warm salt-water clysters are clearly indicated; and, although the last to be noticed, I am not sure that it is the least in importance, an emetic may prove a useful ancillary.

---

31. *On the Cure of Phthisis by exercise of the lungs and by fattening.*—By M. Bureaud—Rioffrey. (Memoir read to the French Academy of Science. *Comptes Rendus T. XXIV. p.* 11.—The author exhibits, in the following terms, the conclusions which he thinks can be deduced from the considerations exposed in his *memoire.*

"Anatomical researches and autopsies having proved conclusively that tubercles are inorganic, unassimilable, foreign

bodies in the economy, it is necessary to prepare the way by which they may be expelled.

"Exercise of the lungs may fulfil this indication ordinarily, by strengthning the bronchiæ and measurably dilating them. It is necessary to regulate and adapt the respiration to the strength of the patient and the demand of pulmonary combustion.

"Alimentation ought to furnish the plastic elements and the elements of respiration. On analyzing all the well established cases of cure, we find that it has occurred under the influence of a restorative alimentation; that in those individuals who exhibit a return of the adipose material, the cretaceous matter of the tubercles remain as it were suspended in organs in the inert state; while in debilitated individuals, the tubercles tend always to softening and disorganization.

"In repairing the waste of consumptives, we ought always to endeavor to fatten, in order to prolong life and to change their constitution; or their tuberculous diathesis. Tubercle being a disease which reproduces itself, we can only guard against relapses by a thorough change of constitution." P.

---

32. *Clinical Statistics of the Learned Profession.*—(*Med. News.*)—From a statistical document recently published in the *Moniteur*, it would appear that of all the liberal professions, medical men furnish the smallest number of criminals; the number is indeed so small, that it has been found impossible to fix a fractional ratio as with the other classes. Since the year 1829, not more than *two* physicians have been tried as criminals at the assizes. In the ten years, from 1829 to 1839, there were tried in the various criminal courts, forty-one thousand six hundred and seventy-nine male prisoners, above the age of twenty-five years; among these were thirty-three priests, thirty-three lawyers, seventy-five notaries, sixty-six tipstaffs, but not a *single medical practitioner.*

PART V.

NOTICES OF EMPIRICISM.

1. *Advertisement of Secret Remedies and Empirical Associations.*—We regret to perceive, that the conductors of Medical Journals are not sufficiently guarded in the admission of advertisements. It is true, the advertising department is usually under the control of the publishers; but we can scarcely suppose that any advertisement would be inserted contrary to the wishes of the Editor. When an advertisement is spread before the public, through the agency of a Medical Journal, it is presumed to have received the sanction and approbation of the Editor; and, indeed, it is almost equivalent to his certificate in its favor.

Our attention has been particularly directed to this subject by two advertisements; the first is, *McMunn's Elixir of Opium.* Several medical journals contain advertisements headed "*Dr. McMunn's celebrated Elixir of Opium;*" to which is appended the certificates of several medical gentlemen, including *professors*, non-professors, and chemists; all done according to the most modern and approved style of *Nostrum Certifiers*. Now, what are the results? McMunn's Elixir is a secret remedy—a *nostrum*—it goes to the public under the sanction of medical men, as certifiers to its efficacy, the whole duly published in a medical journal. Here is the *form* if not the *substance* of Empiricism; and the direct tendency is to encourage the consumption of quack medicines. It is clearly the duty of all conductors of medical journals to reject such advertisements.

The second obnoxious advertisement which has fallen under our notice, is contained in a late number of the *Boston Medical and Surgical Journal.* This is an advertisement of the "*American Institute of Homœopathy.*" We presume the Editor was absent when that precious notice was inserted, otherwise his sense of propriety would have caused its rejection.

In vain may we lament over the success of quackery and quack remedies, while the profession, and even medical journals, aid in their propagation.

PART VI.

EDITORIAL DEPARTMENT.

THE NATIONAL MEDICAL CONVENTION.

The National Medical Convention convened in Philadelphia on the 5th of May last, and remained in session three days. A large number of delegates were present, although not representing equally the different portions of the Union. The following officers were elected: *President*, J. Knight, of Conn.; *Vice-Presidents*, A. H. Stevans, N. Y., Geo. B. Wood, Phila., A. H. Buchannan, Tenn., J. Harrison, La.; *Secretaries*, R. D. Arnold, Ga. A. Stillé, Phila., F. C. Stewart, N. Y. At the close of the session, the *Convention* resolved itself into the "*American Medical Association.*" The following officers were elected for the Association: *President*, Dr. Chapman, Phila.; *Vice-Presidents*, Dr. Knight, New Haven, Dr. Stevens, New York, Dr. Moultrie, S. C., Dr. Buchannan, Tenn.; *Secretaries*, Dr. Stillé, Phila., Dr. Dunbar, Balt.; *Treasurer*, Dr. Hays, Phila. Baltimore was designated as the place for the next meeting.

In place of copying the minutes of the Convention, we insert the following paper written by Prof. Annan, who was a member. It embodies, we are of opinion, very nearly the sentiments of the profession here.

Remarks on the Proceedings of the National Medical Convention.—By SAMUEL ANNAN, M. D., Professor in Transylvania University; a Member of the Convention.

It is known to most of our readers, that there was a convention of physicians in the City of New York, in May 1846, which, after appointing several committees to report on various subjects, adjourned to meet in the City of Philadelphia on the 5th of May, 1847. About two hundred and twenty-five delegates accordingly assembled, and the meeting was organized by the election of a President and other officers. The greater number of the delegates were from the Eastern and Middle States, and they were sent to represent Medical Associations of very diversified characters. Some came from chartered medical societies, in-

stituted for a variety of purposes, viz: either to grant licenses, with or without examination, or to promote the interests of science; others came from self constituted bodies, organized for mutual improvement; while a third class were delegated from a meeting of a few physicians, hastily assembled for the purpose. Each association appointed as many representatives as it pleased; the consequence of which was, that the representation from different sections of the country was very unequal: So small a number of delegates appeared from the West and South, that it may be said, these portions of the Union were not represented at all. Neither were the medical colleges of the country fairly represented. From many of them there was no delegation. Thus constituted, we feel inclined to deny that this convention had a right to assume the title of *National*, and that its decisions are in any way binding upon the profession of these United States. The greater part of the physicians were not represented; and the action of this convention, as far as its legislation is designed to operate upon the whole country, is the same in principle with that which produced the separation from Great Britain, by means of our revolutionary war. The republican doctrine of "no taxation without representation," has obtained too firm a hold of the feelings of our people, to suffer them to accord obedience to laws, with the enacting of which they had nothing to do. Whatever, therefore, may be the moral influence of this convention, it is obvious that its decisions cannot have the force of law. Indeed, the gentlemen who brought the reports from the different committees, appeared to be fully aware of this. Certain resolutions were appended to each report, in which it was *recommended* that a particular course be adopted in reference to the supposed deficiencies of the profession. Now, admitting the right of this body to recommend, it will not, we presume, be denied that those for whom these recommendations are designed, have an equal right to adopt or reject, as they may approve or disapprove. The very meaning of the word shows that the thing praised or commended, must be made acceptable, before it can be received or adopted. It is thus, we think perfectly evident, that the meetings of this convention will be entirely nugatory, except as far as its recommendations may meet with the approbation of the parties to whom they are addressed.

In the reports of the committees, and more especially in the speeches of the members of the convention, there were numerous and strong professions of regard for the interests of suffering humanity. The prevailing opinion was that the profession of medicine is in a very degraded state; that there is less general and medical knowledge amongst physicians, than in the "good old times;" that its respectability has been greatly lessened; and that matters are annually becoming worse. Loud and melancholy

were the lamentations over the injury done to society by the crowd of imperfectly educated young men, who are pressing into the ranks of the profession. The rapid increase of the number of students who attend the medical colleges, attracted by the facility with which degrees are obtained, it was said, was well calculated to produce mournful forebodings in the mind of every philanthropist. While this was the general tenor of the remarks, there was one old gentleman from New York, whose grey hairs and bald head, and venerable appearance, imperatively called for the most respectful attention, who took a very singular view of the subject. He insisted that it was the injury done to the doctors themselves by the host of young and active competitors who are continually sent out by the medical colleges, with the highest honors of the profession, to contend with them, and too often successfully, for that patronage, on which they depend for the support of themselves and families, which is the chief grievance. "Mr. President," says he, "these youngsters endeavor to make it appear that we are superannuated before we have reached the maturity of our intellects." In the opinion of this venerable father, it is necessary to apply some check to the rapid multiplication of physicians, not that the community may be saved from destruction, but that those engaged in practice may remain undisturbed in the possession of the public confidence. It is, however, but simple justice to state that this gentleman was regarded as eccentric and indiscreet.

Whatever may have been the motives which actuated the majority of the convention, we have the misfortune to differ with them, when they assert that the medical profession of this country is deteriorating. We entertain the opinion that our physicians have improved, are improving and will continue to improve. We believe that medical instruction has kept up with the progressive advancement of the methods of general education; and that the facilities for imparting knowledge, are greater at the present time, in our medical colleges, than at any former period. This, we think, is to be ascribed to the spirit of emulation which has been excited by the rivalry of the new with the old institutions. It is an obsolete idea, that the key of the temple of science has been deposited with some venerable *Alma Mater*, from whom alone the privilege of examining the mysteries of the inner courts can be obtained. The doctrine of free trade has been much extended since the time of Adam Smith; and it is now a prevalent opinion that science, as well as commerce is injured by the shackles of excessive legislation. If we direct our attention to the ancient universities of Great Britain, Oxford and Cambridge, and inquire whether they have, at any period of their history, taken the lead in scientific investigation, we shall be compelled to reply in the negative. It would be easy to show that we are indebted for the brilliant discoveries of the present century, and for the

best publications in the different departments of science, to private enterprise, and to individual effort. So again if we ask, has the medical department of the University of Edingburgh, formerly so celebrated, sustained its ancient reputation? we must answer, it has not. It is the new schools, which have a reputution to make, and which start with the vigor and freshness of youth, which have been foremost in the career of modern improvement. Look at the works which have emanated from the medical departments of the London University, and Kings College, and see how superior they are to most of the publications of the older colleges. If then, a correct view of the subject is taken, there can be no valid objection brought against the establishment of new colleges, provided their regulations are such as to ensure a good education to those who may attend them. It is true that if the college is not suffisiently provided with a library, museum and chemical apparatus; if the professors are not men of the requisite talents and acquirements; or if the course of instruction is too brief, the student will not obtain the best education which the country can afford. It is also true, that by reducing the fees of the professors, and by giving long credits, taking promissory notes which are never paid, a show of prosperity is in some cases exhibited, which has no real foundation; and that in this way, an inferior class of medical men are palmed upon the community. Notwithstanding these objections to the increase of the number of the medical colleges, we still contend, that by calling forth into active competition, a large additional amount of talent and learning, the effect has been highly beneficial to the interests of science; and that the numerous medical journals, to say nothing of the large works, which have been published by the professors, are demonstrative evidence of the truth of this assertion.

But let us inquire how it has happened, that medical colleges have multiplied so rapidly in this country. The National Convention argues, that all the evils which are supposed to exist may be traced to the establishment of new colleges by ambitious men, many of whom are unfitted for the office they have assumed. In this manner, it was asserted, young men are enticed into the profession, who otherwise would not have thought of entering its ranks. Now this, we humbly conceive, is another of the mistakes of the convention. It cannot be denied that the advancement of these United States in population and prosperity, is unparalleled in the history of nations. We double our population in twenty-five years. To supply this enormous growth of the number of inhabitants with physicians, there must necessarily be a corresponding increase of the number of medical students. Our profession has always been exceedingly popular with young men. They see so many attain to eminence in the profession, and to high rank in society, whose early advantages were not great, that it is not surprising that young men are strongly tempted to en-

gage in the study of medicine. The examples of failure too, are few, compared with the number who embark in the enterprise; and as long as the difficulties of securing a living practice are no greater than they are at present, we do not see how it is possible to prevent our young men from becoming students, and preparing themselves in the best possible manner of which the condition of medical education admits, to assume the responsible duties of the physician. In all parts of Europe, the medical profesion is much more crowded than with us. The supply of physicians is always above the demand, because the profession is popular there as well as here, with young men about to engage in some business; and the increase of population is extremely slow. So great is the difficulty of building up a practice which will afford a maintenance for a family, that thousands of dollars are frequently given for a partnership, or for a recommendation to his families by an old practitioner, about to retire from business. When this state of things shall have arrived in this country, young men will be more cautious in rushing into a profession already overstocked. But it is because so few fail of success, that so many are induced to commence the study; and it is therefore incorrect to say, that it is the medical colleges which entice young men to engage in the study of medicine.

In opposition to the above opinion, we maintain the position, that it is the astonishing and unexpected increase of the number of medical students, which has caused the establishment of so many new medical colleges. Men are not generally so blind to their own interests, as to risk capital, time, labor, and reputation, without a fair prospect of remuneration. If those gentlemen, who undertake to build up a new college, did not suppose that they could induce a portion of those already engaged in the study of medicine, to attend their new institution, instead of some of the older ones, they unquestionably would not hazard the enterprize. It is because they see the classes so large in those colleges which have been in operation a longer or shorter period, that they are excited to desire a share of the honors and profits of teaching medicine, and incur all the risk of an attempt to build up a new school. That this is the natural progress of things, is proved by the most casual observation. Why has a fifth medical school been recently organized in Philadelphia? Simply because there are more than one thousand students of medicine in that city every winter. And as soon as the number increases to fifteen hundred or two thousand, additional schools will start into existence, and endeavor to divide with those which have preceded them. And will any one assert that, if this competition is conducted in as honorable a manner as can reasonably be expected; if no very dishonorable means are resorted to, to induce students to select particular schools in preference to others, that the result would not be beneficial to medical science and to the com-

munity. For ourselves, we have no doubt upon this question. There must necessarily be incessant efforts on the part of the competitors to gain and to maintain a reputation which will bring students to their halls.

But let us inquire how all this is to be prevented, if we admit, with the National Convention, that it is positively injurious, in every point of view in which it can be considered; viz: whether we regard its bearings upon science, the profession, or the public. In the present state of our laws there is no possibility of preventing young men from studying medicine, and engaging in the practice; or practising even without previous preparation. It is not thought to be a very difficult matter to acquire a sufficient knowledge of the various maladies to which human beings are liable, to qualify a man to become a physician; and hence we find many practising medicine, who have attended only one course of lectures, and many others who have never been at any college. As long, then, as the community entertain the opinion that there is no great mystery in the art of prescribing for diseases, and that but little previous preparation is required to enable any one of common sense to practice medicine with success, it is in vain that the medical faculty attempt to prevent the youth of our country from engaging in this calling as a means of obtaining subsistence. It is therefore, we conceive, a very erroneous and superficial view of this subject, which ascribes the culpability, if any there is, to the colleges. Public opinion is opposed to granting a monopoly of the right to practice medicine, and is in favor of making this occupation as free as any branch of trade; so that any man's son may select the calling of a physician as the business of his life, as freely and with no greater restrictions than he would be subject to, if he should choose to become a tailor or a shoemaker. Any one may offer himself to the community as a mechanic, without having served a regular apprenticeship, just as any one may offer his services as a physician, without having gone through a regular course of preparation; and in both cases the community are to decide previous to giving them employment, whether as much dependence can be placed upon them, for the skilful performance of their respective duties, as upon those who have spent the usual time and labor in qualifying themselves. Whether good or evil results from this unbounded freedom is not the question at present to be discussed. That such is the state of things is unquestionable; and it is also a melancholy truth, that some of the students of medicine attend our medical colleges, more for the purpose of obtaining the honor supposed to be conferred by the degree of Doctor of Medicine, than to acquire the requisite qualifications for becoming skilful physicians. This will invariably happen where a high standard of attainment is not required by the people of any particular district. The title of Doctor is sufficient to give rank amongst an unen-

lightened community: and men can always be found willing to accommodate themselves to the state of public opinion on every subject.

On the subject of preliminary education, we believe the convention has gone as far astray, as upon any other point; and is as far in advance of the state of society, as at present constituted in this country. The recommendation is, that no young man be permitted to enter the office of a physician, as a student of medicine, who is not acquainted with the Latin and Greek languages, and with the Elementary Mathematical Sciences, including Geometry and Algebra, and also with Natural Philosophy; and that the medical colleges allow only such to attend their lectures, and obtain degrees. The first objection to this plan is its impracticability. Young men thus prepared, are not to be found. If all who obtain the degree of Bachelor of Arts, from Literary Institutions, should study medicine, they would scarcely supply the demand for physicians; and it is known that a large majority engage in the study of divinity and law, or become merchants and farmers. Another insuperable difficulty is, that besides all the attractions of the profession of medicine, physicians engaged in an extensive practice, hold out inducements to the youths in their respective neighborhoods to enter their offices as students, because it relieves them from a great deal of labor, to have some one to put up medicine from their prescriptions. We have known physicians to instruct their wives in this part of office duty; and in sickly seasons, such assistance is frequently indispensable. To secure this aid, not only is every encouragement presented in the way of argument, but the ordinary fee is not demanded. We opine that Latin, and Greek, and Algebra will be as feathers in the scale, when weighed against convenience and interest.

In the second place, this plan begins at the wrong end. The community must first receive a liberal education, and then there will be a demand for at least an equal degree of attainment amongst physicians. If we cast our eyes over the whole country we shall find that in every district, the medical men are amongst the most enlightened; and that their learning, as the general rule, is in correspondence with the state of the general information of the people. In the larger cities and towns, the learning of physicians will compare advantageously with that of any other class. Who are the principal contributors and workers in founding and supporting the magnificent establishments of Boston, New York, and Philadelphia, for the advancement of science, literature, and the arts. They are the physicians of those cities. And we were astonished that those members of the convention, who exerted a dwarfish eloquence to calumniate their brethren, were not awed into silence by the splendid hall and museum of the Academy of Natural Sciences; in the building appropriated to which the meet-

ings of the convention were held. But is any one so foolish as to conceive the possibility of desecrating the talents and learning, most of which is found amongst the medical members of that association, required to build up and sustain that noble institution, by sending their possessors to endure the drudgery, and submit to the intellectual depression, necessarily connected with the practice of medicine in a rough country, amongst an uneducated people? A physician must converse, with those who employ him, upon those subjects adapted to their knowledge and tastes; and if he has been educated above their standard, he must bring himself down to their level; and the inevitable consequence is, that he forgets all that he is not in the habit of daily using; and in a few years is but little elevated above his neighbors. Now we humbly conceive, that it is requiring an impossibility to insist that all the physicians of our new, thinly populated, and as yet, in many parts, rude and unenlightened, country, shall be men of high scholarship. On the contrary, we maintain the opinion, that young men of plain education, who have had their constitutions invigorated by labor, from their youth to manhood, are the best qualified for these situations. The course of study which such young men pass through, while preparing themselves for graduation at one of our medical colleges, will expand and strengthen their minds, in at least as great a degree as any course of Latin, and Greek, and Mathematics of the same duration. And when we consider that one great object of education is to develop the mental faculties, it must be obvious that if this is effected by the study of medicine, while at the same time the knowledge is acquired which prepares for usefulness as a practitioner, all of this outcry about the absolute necessity of a thorough preliminary education, is supremely ridiculous. It must not, however, be supposed that when we contend that the mind may be sufficiently expanded and disciplined by the study of medicine, to fit it for the practice, that we object to the most complete education which can be furnished by our best colleges. In no other profession is thorough scholarship likely to be turned to better account.

In the third place let us suppose that the Professors in the medical colleges should be so unwise as to adopt the recommendation of the convention, and that the physicians should refuse to take students unless they are acquainted with Latin, Greek and Algebra. The result would be, that thousands of practitioners of medicine would spring up, whose only sources of information would be a little reading at their own homes; and thus in a few years, we would have a host of doctors, entirely ignorant of anatomy, chemistry, pathology, and surgery; and also of therapeutics, until repeated and fatal experiments upon their fellow-creatures, should have enabled them to discriminate disease, and apply the proper treatment. Will the members of

the convention, a majority of whom, it may fairly be presumed, had received very much such an education as is common in the present day, venture to assert that such a state of things would be preferable to that which has given them their standing in the community, and in the medical profession? They may be regarded as a just representation of the existing system of instruction; and if such are its fruits, we think that the public has no right to complain. It was remarked, that a more respectable body of gentlemen, both for appearance and intelligence, could not be assembled.

In the report of the committee on Medical Education, it is recommended that the courses of lectures in the medical colleges be extended to six months. In our best schools the duration of each course, is at present four months. That the course of study is sufficiently brief, is admitted, we believe, by all the professors of all our colleges. Hence, in many of the colleges, the lectures begin the first of October, and students are invited to attend during that month. But few, however, avail themselves of this privilege, and a large majority do not make their appearance before the month of November, when the regular course begins. So again, to induce pupils to attend a third course of lectures, no charge is made for tickets of admission; and the only expense that they are subjected to, is that for boarding. Still but few avail themselves of this liberal offer. It is, therefore, problematical to say the least, whether it would be wise to adopt this recommendation. It is the opinion of many judicious members of the profession, that the increase of the number of those who would attend but one course, would more than over-balance any benefit that might accrue from the additional information that might be communicated to those who would go through the full term, and take degrees. While then it must be admitted that too long a time cannot be devoted to the study of medicine, previous to commencing practice, we must take care, that by demanding more than the state of the country will enable us to carry through, we do not diminish in place of adding to the duration of the period of preparation.

This committee also insists strongly upon the necessity of imparting clinical instruction. That clinical lectures are of great value, where all the circumstances are favorable for the delivery of such a course, must be acknowledged by all familiar with the subject; but that they have been of much utility as managed at the greater number of the hospitals connected with the colleges of our country, we unhesitatingly deny. The number of patients in our hospitals is small, and there is no great variety of diseases; and the buildings are for the most part so far from the schools, that students can with difficulty be prevailed upon to attend. We have not, as yet, in our highly favored land, a sufficient number of poor, who are willing to send their sick friends

to a public charity, to be cured of their maladies. The honorable pride of the needy poor, revolts at the bare idea of pauperism; and as long as they can obtain the necessaries of life, humane physicians can be found to attend them gratuitously when sick, and also to furnish them with medicine. Hence it is, that we have no large hospitals, except those connected with our alms houses; and they are not under the control of professors of the medical schools. Owing to these causes, clinical instruction has been of comparatively little benefit to the student; and the source of this recommendation of the convention, is a more or less intimate acquaintrnce with what has been accomplished in the large hospitals of Europe, filled with paupers produced by an excess of population and other causes.

In our country, instruction by the private preceptor of the pupil, at the bedside of such patients as he can take him to see, must for many years, supersede the clinical lectures of public hospitals; and those of us who have witnessed the confusion of a crowd of students, all anxious to learn, rushing pell-mell from one part of a ward to another, and most of them unable to see the tongue or feel the pulse, may well experience some doubts whether clinical instruction in hospitals, is always as valuable as many suppose it to be. Another method still more objectionable, has been adopted in some places, viz: that of bringing the patient into an amphitheatre containing three or four hundred students, and attempting to give them some idea of his case, by a lecture. The impossibility of profiting by such a course, must be apparent to the most unenlightened in such matters. Certain we are, that unless under peculiarly favorable circumstances, clinical lectures are not productive of any beneficial results; and that the student will learn more by closely watching the progress of one case of remittent fever, with the aid of his private preceptor, than he can by taking a superficial glance at fifty cases in a hospital, with the precise condition of not one of which can he have an opportunity of becoming acquainted.

The chief duty of our professors, would seem to be, to teach the best established principles of the science, as they come to be developed by more careful observation of facts and more cautious generalization. These principles being firmly fixed in the mind of the student, their application in practice, is comparatively easy. In other respects, the course of study recommended by this committee, is the same as is pursued in all of our best colleges. Lectures should be given, they say, "on the theory and practice of medicine; the principles and practice of surgery; general and special anatomy; physiology and pathology; materia medica; therapeutics and pharmacy; midwifery, and diseases of women and children; chemistry, and medical jurisprudence."

A report was presented to the convention, by a committee appointed to consider the propriety of separating the business of

teaching, and the power of licensing to practice, from each other, and to place them in different hands; but as the discussion of this subject was postponed until next year, and no plan of action was either recommended or adopted, we do not think it advisable to make any remarks on this subject. As soon as we are favored with the method of the National Medical Association, which will convene in Baltimore, in May, 1848, by which it is proposed to effect this separation, we will be prepared to examine its practicability.

Reports were also presented and adopted by the Convention, on the registration of marriages, births, and deaths; on the formation of the National Medical Association; and on a code of medical ethics. Upon these subjects there was but little difference of opinion.

DOMESTIC CORRESPONDENCE.

JUDKIN'S OINTMENT.

℞.	Ol. Lini.	lb.xvi.
	Oxyd. Plumb. Rub.	lb.ij.
	Spt. Terebinth.	℥iv. M.

After boiling the oil four or five hours, to a proper consistence, then add the lead, and when cooled down to about 110° F. add the turpentine.

This is the formula for an ointment called by my name, and is still to be found in the drug stores from Maine to Georgia.

When I was a student of medicine, I was imprudent enough to be persuaded to procure a patent-right for this ointment, being ignorant, also, of such *impropriety*. But after going into the practice, and mingling with the profession, I soon discovered that it was improper for any physician to monopolize, and secretly use or prescribe agents or remedies of this character. I therefore abandoned it, so far as it related in keeping the knowledge thereof from the profession. I gave it up to a man (not a physician,) in the neighborhood, with a strict injunction that he should use his own name in all preparations, vending, &c., &c., connected with the ointment, and that my name should never be used in connection with it in future. This man travelled on this errand over most of the United States, as I have been informed, made and vended the ointment extensively, and *contrary* to his solemn engagement, used my name in all preparations, certificates, &c., greatly to my injury and disappointment.

I went before the 16th medical district society, (of which I was

a member,) and at a full meeting of said society, from various parts of the district, gave them a formula of the ointment, informed them freely and fully of the whole transaction, and made a public acknowledgement to the profession, of my conviction of the impropriety of a physician dealing in secret prescriptions, as it relates to the *profession*, of *any kind*. This was more than thirty years ago, and from that day to this, I have continued to abide under the same opinion, and the longer I remain in the profession, the more fully am I convinced of the propriety of this *cardinal* principle in the medical profession. And if there is any one thing connected with the practice of medicine, that I dislike more than another, it is most prominently to be found in quackery of any kind, and more especially in physicians vending, dealing, or prescribing *secret nostrums*.

I now *reiterate* this statement, to place myself right before the *uninformed*, and honorable minded part of the profession. Hoping that no motive will ever *again* prompt any one to *place me wrong* before a profession with which I have so long satisfactorily mingled, and which I love to promote and honor.

WILLIAM JUDKINS, M. D.

Cincinnati, 5th mo. 1847.

Dr. HAMILTON, of East Liberty, Ohio, makes the following remarks in relation to the use of quinine in malarious fevers of that locality:

"This district of conntry is somewhat malarious. During the past season the fevers assumed a congestive character, chiefly intermittent; and unless promptly checked by the free administration of quinine, proved fatal. A good many cases assumed a gastro-enteric form, attended with vomiting blood, and large evacuations from the bowels, resembling in appearance beef brine; which prostrated the patient in a few hours. The treatment was sulph. quinine in doses of 5, 10 or 15 grs., combined with morphine or opium, every hour or two, according to circumstances; and also brandy almost ad libitum. This practice was eminently successful—not losing one patient where it was promptly adopted; and where quinine was not used, or used sparingly, the disease was very fatal.

In all malarious fevers, I have used the quiuine in large doses,

(that is, large for this country,) from 5 to 15 grs., with the happiest effects. In the common remittent and intermittent feyers, I administer it in combination with calomel, and have not seen that it has any tendency to produce ptyalism. This practice will break up a fever in four or five days, that would, by the old treatment, require fourteen or fifteen days; and by taking a small portion of quinine daily, for four or five weeks, relapses would almost invariably be prevented. It is also necessary to use blue moss occasionally, to correct the secretions of the liver.

I have not found that free doses of quinine increased the determination to the brain. *Case.*—Mrs S. in September last, was attacked with congestive intermittent fever—type quotidian. At noon the paroxysm commenced, and she would remain perfectly insensible till about three o'clock next morning, when she would partially awake, but remain rather listless till towards noon. I did not see her until she had had two such paroxysms; I then gave during the remission, (or intermissioa, if it could be so called,) quinine, grs. 6; calomel, grs. iij—iv, every hour till the stupor returned, and then gave active cathartics to produce evacuations of the bowels. Next day same treatment; no return of the paroxysm. Cold applications were also applied to the head.

The prejudices against the use of this Sampson of the Materia Medica, are fast giving way in these regions; and the fear of its administration, when there is a little headache, or a little fever, is beginning to vanish. Facts speak in tones not to be misunderstood, and old scholastic dogmas must give way."

Dr. SHEPPARD, of Germanville, South Carolina, gives the following case of dilatation of the right auricle of the heart, and the formation of coagula.

"At the autopsic examination of a negro boy, dead of typhoid pneumonia, the right auricle of the heart was three or four times its natural size, of a deep scarlet colour; and on opening that cavity, a bright yellow substance was brought to view. On examination, I discovered that it was a fibro-fatty substance of about six lines in thickness, lining the whole of that cavity of the heart; and shreds extending from it, and lining the superior and inferior vena cava, six or eight inches. The walls of this portion

of the heart were somewhat attenuated, the other portions natural. The pulse in this case was feeble and frequent."

A place without Doctors.—The Post Master writing from Geneva, Coffee county, Alabama, makes the following *extraordinary* annunciation:

"Strange to say, among a population voting about eight hundred, some pretty large families, and this village containing about forty families, we cannot count *one doctor*. Our village, Geneva, is on a stream navigable for steamboats, at the heart of navigation, and in a cotton region."

"*Ship Fever.*"—This fever, presumed to be *Typhus*, is prevailing extensively in the Eastern cities, especially in the hospitals. It seems to have been imported by the emigrants, and presents every evidence of being contagious. Dr. Van Buren, a promising young physician of New York, contracted the disease in the Bellevue Hospital, and died within a few days.

OBITUARY RECORD.

[A part of the following notices should have appeared in the May number.]

DIED—In Philadelphia, May 9th, GEORGE McCLELLAN, M. D., formerly Professor of Surgery in Jefferson Medical College.

—— in New York, April 29th, JOHN REVERE, M. D., Professor of Theory and Practice in the University of New York.

—— In Richmond, Va., May 11th, A. L. WARNER, M. D., Professor of Surgery in the Medical College of Virginia.

—— In Marietta, Ohio., JOHN COTTON, M. D., aged 86.

—— In New York, May 19th, of "Ship Fever," AUGUSTUS VAN BUREN. M. D., aged 23, Assistant Physician at Bellevue Hospital.

—— In Cincinnati, in April last, NOAH WORCESTER, M. D., formerly Professor in the Medical College of Ohio, and in the Cleveland Medical College.

—— In Charleston, S. C., January 19th, 1847, Dr. S. SINKLER, one of the Editors of the Southern Jour. Med. & Phar.

—— In Paris, France, recently, M. LISFRANC, one of the most distinguished surgeons of Paris.

—— In Paris, France, February 4th, in his 70th year M. DUTROCHET, the discoverer of the physiological laws of Endosmosis and Exosmosis.

—— In Paris, France, BARON PASQUIER, chief surgeon to the King of the French.

CONTENTS OF WESTERN LANCET,

FOR AUGUST AND SEPTEMBER, 1847.

PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—Practical Remarks on Typhoid Fever. By Dr. T. M. TWEED, of Georgetown, Ohio. - - - - - 133

ART. II.—Cases of Fever. By WILLIAM B. WALLACE, M. D., (late of Madison county, Ky.) Platte city, Missouri. - - 142

ART. III.—A Report of Surgical Cases which occurred at Buena Vista, Feb. 23d, 1847. By A. M. BLANTON, M. D., Surgeon 2d Ky. Reg. 154

ART. IV.—A case of Aneurism of the Aorta, simulating disease of the Lungs. Fatal from its rupture into the substance of the Lungs. By P. J. BUCKNER, M. D., of Georgetown, Ohio. - - 160

ART. V.—Thoughts on Factitious Diseases. By L. FIRESTONE, M. D, of Congress, Ohio. - - - - - - 164

ART. VI.—Tumefied os Uteri. By A. E. BROCKWAY, M. D., of Ashford Springs, Sumpter county, Southern Alabama. - - 170

ART. VII.—Treatment of Intermittent Fever. By J. C. GRAY, M. D., of Mount Vernon, Illinois. - - - - - - 172

PART II.

REVIEWS AND NOTICES.

ART. VIII.—A Treatise on the Practice of Medicine. By GEO. B. WOOD, M. D., Professor of Materia Medica and Pharmacy, in the University of Pennsylvania; one of the Physicians of the Pennsylvania Hospital; one of the Authors of the Dispensatory of the United States of America, etc. In 2 vols. Philadelphia: Grigg, Elliott & Co. 1847. pp. 791, 840. - - - - - - 174

ART. IX.—Medical Botany; or a description of the more important Plants used in Medicine, with their History, Properties, and mode of Administration. By R. EGLESFELD GRIFFITH, M. D., etc. etc. With upwards of 300 illustrations. Philadelphia: Lea & Blanchard. 1847. 8vo. pp. 704. - - - - - 178

ART. X.—The Medical Students' Vade Mecum, or Manual of Examinations upon Anatomy, Physiology, Chemistry, Materia Medica, Obstetrics, Practice of Medicine, (including Physical Diagnosis and Diseases of the Skin,) and Poisons. Second edition, revised and greatly enlarged. By GEORGE MENDENHALL, M. D., Lecturer on Pathology in the Medical Institute of Cincinnati, &c. Philadelphia: Lindsay & Blakiston. 1847. 12mo. pp. 574. - - - 180

ART. XI.—Outlines of the Veins and Lymphatics; with short descriptions. Designed for the use of students. By JOHN NEILL, M. D., Demonstrator of Anatomy in the University of Pennsylvania, &c. Philadelphia: Ed. Barrington & Geo. D. Haswell. 1847. pp. 29. 180

ART. XII.—Elementary Chemistry, Theoretical and Practical. By GEO. FOWNES, Ph., D., etc. etc. etc. Edited, with additions, by ROBERT BRIDGES, M. D., Professor of Chemistry in the Philadelphia College of Pharmacy, etc. etc. A new edition, with numerous illustrations. Philadelphia: Lea & Blanchard. 1847. 12mo. pp. 460. 181

ART. XIII.—Some account of the Letheon; or, who is the discoverer? By EDWARD WARREN. Third edition. Revised and enlarged. Boston. 1847. pp. 88. - - - - - 181

ART. XIV.—The half-yearly Abstract of Medical Sciences, &c. By W. H. RANKING, M. D., Cantab., &c. Philadelphia: Lindsay & Blakiston. January to July, 1847. pp. 364. - - - 184

PART III.

AMERICAN SUMMARY.

1. Endemic Gastro-follicular Enteritis, - - - - 18
2. Account of a Physical sign of Pneumonia at the Apex of the Lungs, 18

3. Effects of Blisters on the Young Subject, 187
4. Properties of the Black Alder, 188
5. Cerebro-Spinal Meningitis, 188
6. Œdematous swelling of the Glottis relieved by Incisions, 189
7. Homœopathy, 189
8. Treatment of Tetanus, 190
9. Cajeput Oil as a Remedial Agent, 190
10. Delirium Tremens treated by Inhalation of Ether, 190
11. Closure of Vagina, with subsequent conception and safe delivery, 190
12. Strychnine in Intermittent Fever, 190
13. Iodide of Potassium in Hydrocephalus, 191
14. Value of Medical Practice in London, 191
15. The Discoverer of the Letheon, 191

PART IV.

FOREIGN SUMMARY.

16. Purple Tint in Inflammation, 192
17. Mode of providing a wet nurse on a sudden emergency, 192
18. Ether in Parturition, 192
19. Alkalies in Diabetes, 193
20. Chronic Inflammation of the Testicle, 193
21. Electric Moxa, 194
22. Treatment of Pain in the Stomach, 194
23. Disease of the bones from Rheumatism, 194
24. Scleroma of the Cellular Tissue of new born children, 194
25. Diuretics in Scarlatina, 195
26. Epilepsy, 196
27. Pityriasis, 196
28. Blood in Puerperal Fever, 196
29. Galvanism in Parturition, 196
30. Mercury in Pericarditis, 197
31. Laryngismus Stridulus, cured by Inhalation of Ether, 197
32. A Horse killed with Ether, 197
33. New operation for Internal Piles, 198
34. Hydraulic Dilatation in Stricture of the Urethra, 198
35. Treatment of Constitutional Syphilis in the Infant, 198
36. Cure of Nævus, 199
37. Potato Disease. 199
38. Precaution against Contagion. 199
39. Acute Rheumatism, 199
40. Treatment of Cancer, 200
41. Scarlatina treated with Distilled Vinegar, 200
42. Fungi in the Mouth and Intestinal Canal, 201
43. Spermatorrhœa, 201
44. The state in which Mercury exists in Hyd. C. Creta, and Pil. Hydrarg. 201
45. Treatment of Chronic Bronchitis, 201

PART V.

NOTICES OF EMPIRICISM.

1. Quackery in Tennessee, 202

PART VI.

EDITORIAL DEPARTMENT.

Resignation.—The Western Lancet.—October Lectures.—University of New York.—Royla College of Surgeons, London. 205
College of Physicians an dSurgeons, N. Y.—Appointment at La Pitie, France.—Abolition of the Concours in France. 206
The National Medical Convention and Medical Reform. By Samuel Annan, M. D. 206

THE WESTERN LANCET.

VOL. VI. LEXINGTON, SEPTEMBER, 1847. NO. III

PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—*Practical Remarks on Typhoid Fever.* By Dr. T. M. TWEED, of Georgetown, Ohio.

From a minute investigation of the subject, I think we are warranted in the conclusion, that the disease known in the United States as Typhoid Fever, is precisely similar to that described by Bouillaud as Fiéver entéro-mésentérique, and by other French writers as Typhoid disease. In the Western country, it is variously denominated nervous fever, congestive fever, winter fever, &c. The first accurate pathological description of the disease was given by M.M. Petit and Serres in 1806. Louis subsequently established the same facts beyond the possibility of doubt. The essential characteristic is anatomical lesion of the glands of Peyer. So far as my researches in the books extend, I believe this lesion is invariably present. M. Chomel, in his Lecons sur la Typhoide, says, that so frequently did he observe this appearance, that during the last five years of his practice, he never met with a contradictory example. Dr. Gerhard, of Philadelphia, whose opportunities for post mortem inspections have been great, declares that he has met with no exceptions. I am aware that lesions of the glands of Peyer, is comparatively of unfrequent occurrence in the Typhoid fever of Glasgow, Dublin, Liverpool, Manchester and London; but in Paris and Geneva, and other points on the continent of Europe, enlargement of the aggregated follicular glands, in the lower third of the *ileum*, and ulceration of the mucous membrane, are constantly observed in post mortem appearances. This discrepancy, in all probability, is to be attributed to the want of a well-defined

diagnosis—a radical defect in the writings of most British practitioners. Dr. Louis states that disorganization of the glandulæ Peyerii is never met with, except in this form of fever. If this be true, and of its truth we need not entertain the smallest doubt, then the changes which take place in these follicles, constitute the true pathology of Typhoid fever.

Is general bleeding a therapeutic indication in this disease? To answer the question in a philosopical manner, we must recur to its pathology. M.M. Petit and Serres, in my opinion, took a correct view of the disease. They did not regard the abdominal lesions as resulting from active inflammation, and, consequently, did not recommend an anti-phlogistic course. Their language is, "la lesion de l'intestin et du mesentre n'etait pas inflamatoire, il est vrai." I know that M. Bouillaud objects vehemently to this view of the disease. But Bouillaud is an ardent follower of Broussais, and therefore, his doctrines must be received with some limitations. Indeed, his great remedy in the treatment of all Pyrexiæ, is active and repeated bleeding. Whether the disease be "fiéver entéro-mésentérique," or "rheumatisme," the great therapeutic indication is the same. This is to strangle (*jugler*) the foe by bleeding repeatedly—"coup sur coup." And yet how widely different is the condition of the blood in the two maladies! In acute rheumatism, there is a great and disproportionate increase in the quantity of the fibrinous matter—in typhoid there is a corresponding diminution of the same material. Now, I submit it to the candor of the profession, if such opposite pathological states of the blood do not require opposite medication? I feel confident that all who are not wedded to dogmas, will respond, certainly, most certainly. But let us examine a few particulars. Andral and Gavarret, in their elaborate memoir on the blood, assert that fibrin never rises perceptibly above the normal standard in true typhoid fever, and that it decreases in proportion to the advancement of the disease. Becquerel and Rodier's researches, establish conclusively the same fact. Signor Renzi, of the Santa Marie Hospital, at Naples, instituted, in 1841, an extensive series of experiments on the blood of typhoid patients, and the result was very similar to that of Andral and Gavarret.

He ascertained,

1. That the coagulum of the blood became soft and oleaginous.

2. That the proportion of its fibrin was very sensibly diminished from the standard of health.

3. That the proportion of the red globules was larger than usual.

4. That the cruor was more or less mixed with the serum, being partially dissolved in it, tinging it a red color, and being precipitated in the form of a pulverulent sediment.

5. That the hematosine had but little coherence with the red globules and the fibrin.

6. That besides being really freed of their coloring matter, the red globules seemed to have lost their central nucleus, and appeared, in consequence, less compact, less solid, and so to speak, less living than is normally the case.

I am thus particular in entering into details, because I wish to show that the blood in this fever is actually in a defibrinated condition; and, consequently, that blood-letting is not only always unnecessary, but often ruinous. It may be enquired how I establish such a corollary? The answer is very easily given. It is a well known law of pathology, that during inflammatory action, fibrin is always increased in quantity; and when this increase does not take place during a given morbid process, it is a rational inference that inflammation is not present. So says the distinguished professor of Pathological Anatomy in Transylvania University.* The great object of bloodletting is to remove congestion—a state which always precedes inflammation—or to subdue inflammation after it is once established. But the disease under consideration is not of an inflammatory character. Therefore, bleeding is unnecessary, and in view of the impoverished condition of the circulating fluid, I reiterate, it is *ruinous.*

But what of purgatives? With a knowledge of the great pathological fact disclosed by Petit and Serres, and confirmed by every succeeding morbid anatomist, would any man, imbued with the commonest of common sense, rely upon purgatives in the treatment of this fever? Common sense, common humanity, respond, no, no. Purgation, carried to any great extent, will *maintain* the very condition of things which we wish to obviate. Aye, repeated purgation will *produce* inflammation and ulceration of the mucous membrane of the bowels, mesenteric glands, and follicles of Peyer and Brunner. Every days experience in the treatment of disease demonstrates this to be true. And yet the followers of Hamilton, and Armstrong, and DeLarroque, purge, purge,

* "Observations on Tubercle and Tubercular Diathesis. An appendix to Barth and Roger's Treatise on Auscultation. By L. M. Lawson, M. D., etc.

purge, and even when the patient is in his last hour of mortal agony—when the soul is quivering upon his lip—they still *purge*. Would to God that we could *purge* such mechanical rotinists from the brotherhood of medicine! Such men never have been, and never will be, of any benefit to their fellows. They have reduced the noble science of medicine to the most abject species of art—they are a burning disgrace to the profession.

Hamilton's practice, in all classes of fever, was to administer saline and other cathartics, so as to produce four or five alvine evacuations daily; and this treatment was pursued throughout the whole course of the disease.

Bretonneau, DeLarroque, Piedagnel, and Andral, pursue a very similar course.

Armstrong, in his otherwise valuable work on typhus,* page 93. says, "In the commencement and whole course of Typhus, it sometimes happens that the bowels are in an apparently lax state; but if the evacuations be carefully inspected, they will be found very fœtid and mud colored, or slimy, chopped, and scybalous; aud, *therefore*, aperients are indispensibly requisite to remove the abdominable irritation, of the existence of which, such stools afford the strongest presumption."

Shade of Hahnemann! if that is not a practical application of the doctrine, *Similia similibus curanter*, I know not what is. I enter my solemn protest against such a deliberate tampering with human life. Whatever may have been the result of the Hamiltonian practice in other times, I hesitate not to say, that in the typhoid fever of this country, and of the present time, such a course of medication would be hazardous, nay, *criminal*. And here let it be distinctly understood, that I am no convert to the physiological doctrines of Broussais. I believe that his views of disease were in a high degree visionary. Still, there is much in them that will stand the test of time and human scrutiny. The advocates of purgatives in fever have run into one extreme, by ascribing to them all power and efficacy—whilst M. Broussais and his followers have passed into the opposite, by an indiscriminate proscrip-

* That Typhus and Typhoid fever are clearly different diseases, is in my opinion, placed beyond doubt. Nevertheless, there are many striking analogies between them;—indeed, so perfect is their resemblance, that M. de Clanbry, in a prize memoir, read before the Royal Academy of Medicine, declares their identity in the following words: "There are no means to distinguish typhus from typhoid fever, in relation either to the lesions or the symptoms of the two diseases."

tion of all that class of remedial agents. The true course probably lies in the medium.

"———Doctrinam acri
Judicio perpende; et si tibi vera videtur
Dede manus—aut si falsa est, accingere contra."

As a general rule, mercurials are not required in the treatment of this disease. In the initial stage a mercurial cathartic is sometimes beneficial in restoring the proper secretory action of the liver, and removing any accidental accumulations. Further than this, so far as my own experience extends, mercury is not useful. I know that it is the custom of many physicians to give calomel in alternate doses, until its specific effects are produced; but the propriety of this course may well be called in question. I have seen all the symptoms aggravated by a persistance in the mercurial course. Cheyne, in the Dublin Hospital Reports for 1818, declares that mercurials actually produce jaundice. Whether this be true or not, it is well known that long continued courses of mercury produce chronic hepatic affections. This may be explained in the following manner: Mercurials persisted in, for any great length of time overstimulate the liver, which finally falls into a corresponding state of collapse. Of course, langor will take place in the portal circulation, producing congestion, and eventually induration or more serious disorganization. Having condemned bleeding, purgatives, and mercurials, it remains to be disclosed what seems to me the best plan of medication in this form of fever. And I will premise:

I. That it is impossible to arrest it in its march.

II. That its course is run in from twenty to thirty days.

III. That a judicious application of remedial agents will conduct it to a favorable issue.

The first and second propositions I believe are now universally admitted by all the best writers, and most experienced practitioners of this country and of Europe. And when we regard the protracted duration of the malady, the subject of diet becomes one of important consideration. Not unfrequently, from an erroneous theory, food is withheld from patients until they die of actual starvation. I have witnessed such cases repeatedly. Now, it has been shown that the blood is in an impoverished condition—that it is defibrinated—that the red globules are *less living* than in a state of health, and therefore, one object of treatment should be to restore the lost fibrin, and thereby bring the blood to something like a normal condition. Nothing will contribute so signally to this end, as the stimulating and nourishing quali-

ties of food. Food is a natural stimulant, and imparts a more natural excitement to the system than medicine.* It ought to be nutritious stimulating, digestible, and not disposed to run into fermentation; and given "regularly, at stated intervals, with the same perseverance that medicines are administered." (Dr. Lawson, Western Lancet, May, 1846.) Dr. Drake recommends strong coffee, milk toddy, made with lime water, if diarrhœa be present, rich soups and jellies, (animal of course,) *ham*, beefsteak, lamb and *poultry*, rice, *Irish potatoes*, toast and crackers. Excluding the ham, poultry, and Irish potatoes, I think the Dr.'s selection of diet a good one.

Quinine.—I perceive that the Editor of the Lancet speaks with some hesitation with reference to the use of quinine in this form of fever. It cannot be denied that its indiscriminate use, has resulted in incalculable injury. At the same time, I am firmly convinced there is a period in typhoid when this medicine is imperiously demanded—when, to withhold it, would subject our patient to the most imminent danger. I allude to the stage of collapse. This stage is characterized by excessive prostration of strength—weakness of the pulse—subsultus tendinum—colliquative diarrhœa—cold, clammy perspiration—fixed and dull, or anxious expression of countenance—sordes covering the teeth, and fœtid excretions. Dr. Buckner, of this place, whose practice in this fever has been remarkable successful, informs me that he employs quinine in the stage of collapse, in ten grain doses, and that when conjoined with the use of the hot mustard bath, and anodyne enemas, he has seen patients apparently rescued from the grave by its magic influence. A similar course is pursued in the wards of La Charité, and with similar success. Of thirty-six cases treated in that hospital, thirty-three recovered; and this extraordinary success is to be attributed, in a great measure, to the plan of medication pursued. The treatment consisted in quinine, chlourets in drinks, baths, and enemas, blisters to the calves of the legs and nourishing diet. Quinine, I conceive, acts as a tonic, a sedative, and an antiseptic. Great care, however, is required in discriminating the proper period to administer it. I regard this as a very important matter; and a want of attention to it, is probable the reason why quinine has failed in accomplishing beneficial results in the hands of so many practitioners. Given when there is great cephalalgia, calor mordax, and considerable

*Dr. Drake, Med. Jour., Vol. 1, page 390.

arterial action, it will certainly aggravate the symptoms, and ought to be prohibited. But administered with proper discrimination, I look upon quinine as the *remedium magnum.*

Hot Baths.—As derivatives, these are of immense value. They contribute greatly to equalize the circulation, and should be of as high a temperature as the patient can conveniently bear. Especially are they applicable in collapse. I know that a directly opposite course is pursued by some practitioners, in the very stage referred to. Among others, Dr. Bouchelle, of Mississippi is in raptures with the *cold douche.** He evidently regards *cold water* as the Messiah of medicine. When the skin is cold and clammy; the pulse thready; the features sunken; the finger nails and lips blue; when there is great epigastric oppression and breathlessness, Dr. Bouchelle applies the cold dash with a liberal hand. Ugh! I shudder involuntarily, even in contemplating such a sublime medicinal baptism. "I am not jesting—no, I am serious."

Blisters—in typhoid are seldom required. Louis has never seen any benefit arise from their application. When applied to the abdomen I have frequently thought they did harm. As a means of producing counter irritation, they sometimes exert a happy influence, when placed upon the calves of the legs. Sinapisms, however, will fulfill every indication of this character. Upon the whole we may say that blisters are inconvenient and dangerous, often adding to the gravity of the disease.

Sub-carbonate of Soda.—Forty years ago, this was a favorite medicine with Dr. Samuel Mitchell, of New York. I have not access at this time, to the Medical Repository, of which Dr. Mitchell was the senior editor, but according to Dr. Hildreth, his theory was, that malignant fevers were caused or greatly aggravated by the generation of septic acid—the elementary matter of putrescency—in the stomach and bowels, which, by a free use of alkalies, was neutralized, and the fever rendered mild and more agreeable. Dr. Hildreth further remarks:† "Whether the septic acid is more or less abundant in fevers, I do not know, but of this I am certain, that in the fever of 1807, alkalies proved to be one of our most useful and salutory remedies, and was equally beneficial in the epidemic of 1822 and 1823."

So far as I have tried the sub-carbonate of soda, my expe-

*Vide, Western Lancet, September, 1846.

†Address before the Third Medical Convention of Ohio, May, 1839.

rience agrees with that of Dr. Hildreth. I have administered it in a number of cases, and in every instance it was followed by a decided improvement of all the symptoms. Of its *modus operandi*, I know nothing. Possibly, Dr. Mitchell's theory is correct. Be this, however, as it may, the medicine is well worthy a fair trial.

Alum.—Fouquier, one of the Physicians of La Charité is in the habit of prescribing alum with considerable success.* Given in the stage of collapse, the diarrhœa diminishes, the tongue becomes moist, and the strength improves. Dose, 24 grains daily, for three or four days; then increased to 3ss, and after the same interval to 3j. When its good effects have been produced, the dose is to be diminished in the same proportion. An excellent vehicle for its administration, is gum water.

Enemata.—In conducting typhoid to a favorable issue, much benefit will be derived from this class of remedies. After a gentle cathartic, in the commencement of the disease, enemas are the only means which should be resorted to for the purpose of removing accidental accumulations from the bowels. For this purpose, cold or tepid water in sufficient quantities to produce mechanical distension of the rectum, is all that is requisite.

In arresting diarrhœa, nothing has proved so efficient, in my hands, as soothing and anodyne enemas, composed of starch and tincture of opium. In that condition of the bowels termed meteorism and tympanitis, Dr. Buckner informs me that oil of turpentine, and mucilage of gum arabic, in the form of enemas, will afford signal relief. When meteorism is extreme, Louis advises enemata of magnesia, in an infusion of flaxseed. In this condition, hot fomentations to the bowels, are eminently useful. In closing this paper, permit me to suggest the following *general rule* for the guidance of the practitioner, in the treatment of the disease under consideration. *Nothing must be anticipated; but the symptoms must be combatted as they arise.*

By a strict observance of the above rule, most cases of typhoid may be brought to a favorable issue. Whereas, if the eclectic system of medicine is abandoned, and an *aggressive* course instituted, a majority of cases must inevitably terminate fatally.

Georgetown, Ohio, 1847.

* Bulletin general de Therapeutique, November, 1835.

NOTE.—As a matter of justice to Professor Lawson I would observe that he does not assent to the opinion, that the small amount of fibrin in this fever, argues against the presence of inflammation. He is now engaged in the composition of a work on *General Pathology*, in which this subject is discussed, and the following brief extracts, which I am kindly permitted to make, will serve to exhibit the Professor's views:

"If any certain diagnostic sign were wanting to establish a marked and radical distinction between true inflammation and idiopathic fever, and to show that a form of fever does exist, uncomplicated with inflammation, that evidence is to be found in the relative quantities of fibrin. We have already seen (referring to a preceding part of the same work) that, in the true inflammatory diseases, fibrin is invariably increased; and it is equally well ascertained that there is a class of fever termed *idiopathic*, in which fibrin is not only *not* increased, but is positively diminished. This is proven beyond doubt, and is definitely settled by the extensive researches of Becqurel and Rodier, etc. It is a very remarkable fact, that in these instances, the blood corpuscles are not similarly diminished, but on the contrary, are not unfrequently augmented. In one instance mentioned by Andral, in which the fibrin was reduced to 1.6., the corpuscles were augmented to 157.7! It is remarked by Andral that the 'dothinenteric plaques' of typhoid fever do not have the power of increasing the cypher of fibrin; and such is doubtless the case, although opposed to the general laws, regulating the production of fibrin in inflammations. In typhoid fever, it is now definitely settled, that inflammation and ulceration of Peyer's glands ('dothinenteric plaques') are constant occurrences; and it may appear anamalous, if not contradictory to the rules already recognized, that the fibrin should be diminished. In those cases of fever, however, a cause is operating which counteracts the tendency to produce fibrin. It is well known that the remote cause of fever, (be it what it may,) tends to derange and finally depress the vital actions; this is especially true of typhoid fever, and the necessary result is, that fibrin is very imperfectly elaborated. It must be remembered that fibrin is but elaborated in proportion to the energy of the vital actions; and as these are remarkably depressed in typhoid fever, even the excitement of the local inflammation of Peyer's glands, is insufficient to prevent the loss of the plastic element. The inflammation, moreover, is itself of a typhoid grade; and if to

this we add, that inflammation of the mucous membrane of the intestines, manifests less sympathetic reactions, and produce less fibrin than most phlogoses, there can remain no embarrassment in explaining *why*, even in perfect harmony with the laws laid down, there should be no increase of fibrin in typhoid fever, although inflammation is really present. It is simply the fact, that the *depressing* cause of fever is more powerful than the *exciting* agency of inflammation."

ART. II.—*Cases of Fever.* By WILLIAM B. WALLACE, M. D., (late of Madison co., Ky.,) Platte city, Missouri.

It is estimated by some authorities, that fully one-third of the human family die of *fevers*. But when we consider the great increase in the prevalence of this class of disease, and the frequent occurrence of fatal cases, no accuracy of estimate is required to impress every one with the importance of the therapeutics appropriate to this subject. It is with much pleasure, therefore, that I have seen it announced in the Lancet that Professor Bartlett is about to publish a new edition of his work, and if we could therein have a collocation of the varied symptoms of continued fevers, with the results of the numerical method of treatment, as applied by Louis, it would, in my estimation, supply the greatest desideratum in medical science. The medical art was, in derision, called by Napoleon, "the uncertain science;" and if we consider how useless, or worse than useless, is the routine treatment of most of the methodical writers, as applied to our *modern continued fevers*, we will conclude, I think, that the great warrior was not much in error.

In the published edition of Dr. Bartlett's work, so far as I can gather, he evidently gives a preference to the "expectant method" of treatment; and this preference is fully justified by my observation in about 30 cases. But the question here occurs, *What is the expectant treatment?* a question, I will venture to say, of as much importance to the subject matter, as the question of the Abbe Seiyes was to the French constitution, "What is the third estate?" which in the States General of France, shook down the monarchy to its foundations.

One will give small portions of calomel and opium; another blue mass and morphine; a third oil and turpentine; and each think he is pursuing the true expectant treatment! What we want is the comparative results of these and other modes of

treatment candidly given to the medical world. In this county, where I have been located two years, typhoid fever, as I am informed, first became prevalent some four years since, and it has, with short intervals of exemption, continued to rage in different localities, generally affecting several members of the same family, either simultaneously or consecutively. The first case of continued fever which I attended in February, 1845, was a young lady, abont 18 years of age, of good constitution, full habit, her parents in comfortable circumstances. Her symptoms were headache, diarrhœa, (slight,) some soreness on pressure of the abdomen, flushed face, ringing sensation in the ears. *Prescription:* Calomel and ipecac, 6 grs. to 1; and on the following three or four days, alternate doses of blue mass, and small doses of epsom salts, each once a day, with warm fomentations to the abdomen. Her convalescence commenced in about a week, and was complete in about four weeks. After the first five days the blue pill was omitted, and the epsom salts, in small doses, given once a day, for about two weeks. After restoration to health, her hair was entirely shed.

One other case, very similar in age, constitution, symptoms, &c., and one, a married lady with five children, with very similar symptoms, soon after came under my treatment. In neither of these was any calomel given. Alternate doses (about five grains) of blue pill followed by a teaspoonful of epsom salts were given each day, warm fomentations to the abdomen, and the extremities bathed with warm salt water, once a day. Under this treatment they both recovered; but the latter subject being a lady of rather delicate constitution, and previous bad health, had such a depression of pulse, that I found it advisable to use a mild tonic (columbo) in decoction.

On the 16th of June, 1845, I was called to see M. T., a teacher of delicate constitution, recently returned from Missouri, where he had been subject to ague. For some week or ten days before, he had been subject to an eruption over his face, breast, arms and abdomen, (petechiæ,) which the family in which he was boarding thought was measles. The remains of this eruption were still visible. He had now diarrhœa, quick pulse, soreness of the abdomen, slight soreness in the back of his head and neck, tongue red at the edges and furred, and on the inside of the lower lip, there appeared a tumor as large as the end of my finger, having an inflamed and *mulberry-like* surface. He evinced from the first, great anxiety and alarm, and slept but little, with a constant ring-

ing sensation in his ears. But I remarked that throughout, he was free from *headache*, although the conjunctivæ were injected, and of a rather dirty hue, with a considerable secretion of puruloid mucous. *Prescription.*—Calomel and ipecac, 10 grs., and warm fomentations to the bowels, (poultices.)

On the 16th, (the next day,) I found the diarrhœa greatly increased. *Prescription.*—Mass hydrarg. 5 grs., acet. morphia, 1-6 gr.; to be taken twice a day. This prescription was continued, with the fomentations, until the 21st. The diarrhœa, (watery,) having somewhat abated under it, but the dejections still continuing too copious and frequent, (five or six per day.) On this day applied an epispastic to the pit of the stomach and abdomen. After it had drawn, poultices resumed. The diarrhœa and other symptoms yet continuing, I now had a consultation with Dr. S., of Richmond, and at his suggestion, gave one blue pill every four hours, instead of twice per day. The morphia, &c., continued. The diarrhœa now abated, the discharges became thick, bilious, and consistent, and we flattered ourselves that our patient was in a fair way to recover; but on the 30th, he was taken with frightful convulsions and delirium. On reaching him, I found him in this condition, with his feet cold, and his head hot, especially on the left side, which, with that side of his face was much flushed. Had his feet immersed in warm water, and after being well rubbed, sinapisms to the legs, cups with scarification over the left parietal bone; 15 grs. quinine, with 20 grs. laudanum in enema. The convulsions and delirium very soon subsided after cupping. [I omitted to mention that about the 25th and 26th of June, he had profuse hemorrhage from the bowels.]

From this time, (29th June,) until the 6th of July, he continued, (under the advice of Dr. S.) to take wine, quinine, and blue pill, *pro re nata*, except that on the 5th, in defiance of his nurse, and on account of the bitter taste of the quinine, he refused to take it, and on the 6th, his wine having failed, and not being renewed until night, the convulsions and delirium again returned with redoubled energy. I resorted to the same means to arrest them, together with antispasmodics. The convulsions subsided, but the delirium, in moderate degree, continued, until the evening of the 7th, when he expired, emaciated to a skeleton. No post mortem examination was made.

At the same house, and at the same time, was a male servant affected with the same disease, about 21 years of age;

rather slender constitution. The eruption had appeared on his face, body, arms, &c.; his lips parched and chapped; tongue red around the edges and slightly furred; pulse quick; diarrhœa considerable; ringing sensation in the ears; soreness of the abdomen on pressure, and his general appearance that of extreme disease. *Prescription.*—Venesection, blue pill, night and morning, for three days, pulv. ipecac, 6 grs. in a tea cup of water, one teaspoonful every three or four hours; fomentations to the abdomen. As there were signs of inflammation or congestion in the thorax, I applied a large blister plaster to that region. This boy convalesced rapidly, but in the course of three weeks a swelling of the scrotum came on which, in defiance of every effort proceeded to suppurate, and on making an incision in it I found so much dead cellular membrane that I had to extract with the forceps and knife, a mass fully a square inch in magnitude. The healing of the wound was slow but progressive, and about the time it closed he broke out with an eruption, from the crown of his head to the soles of his feet, at first of a scaly character, with here and there small pustules. This being attended with such intolerable itching that in trying to relieve it with his nails, the surface at last became almost a continuous scab. From the abraded places, a yellow ichorous matter exuded, which quickly hardened. A variety of remedies were unsuccessfully tried for this anomalous affection. Sulphur and the sulphur baths seemed to aggravate it. It yielded at last to the external and internal use of phytolacca root in decoction, and alterative doses blue pill.

A third case which occurred in the same family, and commenced about the same time, I was not called on to treat until an advanced stage of the disease. The patient, a young man about 18 years old, of scrofulous family, had the characteristic eruption like the others, but his symptoms were so mild that it was not considered advisable to call in any physician until an advanced period of the disease. He then had considerable cough, with mucous expectoration. Diarrhœa, little or no soreness of the abdomen; chest sounded clear on percussion; slight crepitation. After being subjected to treatment, he appeared to be convalescing, and had a return of appetite with subsidence of the diarrhœa. But on eating a full meal of peach pie and milk, his diarrhœa and cough both returned, daily increasing in violence, with puruloid expectoration, and terminated in hepœtization of the right lung and death on the 9th of August.

A fourth case in the same family, which occurred in September following, although not attended with the eruption marking the others, yet from the similarity of the other symptoms, I regarded as a mild attack of the same disease. I kept no notes of the case, but on account of the extremities inclining to be cold and the pulse weak, I gave quinine in addition to the remedies above; and in three or four weeks the patient was well.

Two very remarkable and fatal cases occurred at one house in 1845, among the negroes of Col. H., March 29th, 1845, I was called to see the first, a negro girl about 16 years old, with considerable muscular developement and the appearance of having previously enjoyed good health. She now had slight excitement of the pulse, some diarrhœa, headache, tinnitus aurium, and lay quiet without complaining; her tongue a little red around the edges and somewhat so in the middle. Understood she had been bled by her master a few days before, and taken a dose of calomel. My attention was directed to an ulcer on one of the labia with indurated edges—ordered blue pill to be taken 5 grs., morning and evening, with a small dose of epsom salts each day; warm fomentations to the bowels. Three days after I saw her again: the ulcer on the labium healed, but she now complained of some soreness of the throat. Discontinued the blue pill, as there was some mercurial fœtor and swelling of the gums. Patient to use an astringent gargle to the throat, and take 5 grs. Dover's powder at night to induce sleep, as she complained of insomnolence. At this stage I was first informed by the other servants that some week or so before she was confined, (and after which she had continued to work in the field,) she had had something like an abortion. Early on the 4th, was called to see her again; found her pulse sinking, and the mercurial action entirely subsided.—Called a consultation with Dr. H., of Richmond; gave cal. and Dover's powder, with stimulants and tonics. When Dr. H. arrived, she appeared to be sleeping well, and the pulse somewhat raised. Nothing more was done that night; and on the next morning she had a consistent bilious discharge, and appeared for a time somewhat better; but in a short time the pulse again began to sink, and in despite of stimulants and tonics which we used freely, continued to sink, and she died that day without having made any complaint of pain or suffering.

The second case in the same family, I was called to see on the 15th September, 1845. The subject, a very stoutly built

negro woman, aged about 30. She had been bled by her master, as I understood, ad deliquiem, and taken a dose of calomel some days before I saw her. Her pulse was now excited, tongue a little red around the edges, some tenderness of the abdomen on pressure, diarrhœa, stiffness in the back of the neck and sensation of the soreness over the occiput. *Prescription.*—Cups, with scarification to the nuchæ, followed by an epispastic; to take blue mass 5 grs., night and morning, with a small dose of epsom salts each day. On the next morning, I was surprised to find my patient in a complete state of aphonia, although her intellect appeared unimpaired, so far as could be judged by the signs she used to communicate her ideas. She readily made known her recognition of persons. But strenuously, resisted the administration of medicines, either by the mouth or the rectum, and died the next day without any indication of suffering. Was this paralysis of the organ of voice a sympathetic affection from irritation in the primæ via, or was it a primary affection of the nervous system? To the latter opinion I am inclined, and particularly after what I have observed in subsequent cases.

November 17th, attended S. C., a young lady 17 years of age, good constitution, florid complexion, pulse considerably excited, tongue red and clean, soreness on pressure of the abdomen, soreness on left side of the head, and in the left eye, conjunctiva suffused, tinnitus aurium, slight diarrhœa. Directed calomel and Dover's powder, 10 to 5 grs., dry cupped epigastrium as she refused the scarification. The abdomen to have warm poultices. On the 18th, ol. turpentine rubbed on the abdomen. Epispastic to epigast., blue pill and Dover's powder; 19th continued the pill and powder to the 21st, when from the extremities inclining to be cold, directed to take 4 grs. sulph. quinine, also cupping with scarification to the nuchæ. From this time she daily took a teaspoonful of castor oil, with 4 drops of turpentine, and generally 5 grs. quinine per day, and her convalescene was complete by the 20th of December, being about four weeks.

A remarkable case of continued fever occurred in June, 1846. The subject about 45 years of age, good constitution, and laborious habits. After the first two weeks, during which he had no medical treatment, unless perhaps a mild cathartic —his extremities became cold to the knees and elbows, and remained so for a week or two, in despite of sinapisms, blisters, quinine, and stimulants; during this time his bowels were torpid, the dejections of morbid character, no appetite, tongue

a little red at the edges, and furred in the middle. At first he took cal. et ipec. in small portions, each day in addition to the quinine, subsequently blue mass morning and evening, and the bowels kept open by castor oil. For three weeks he took 5 grs. quinine per day, and his convalescence though slow was uninterrupted.

On the 20th June, Mrs. W., a lady of delicate constitution, was visited by me. I found her with considerable arterial excitement, diarrhœa, headache, pain or soreness in the back of the head and neck. The eyes looked natural although she declared her inability to see; there was great obtuseness of hearing, and her tongue of a deep red color like a piece of raw beef; there was also tinnitus aurium and some soreness of the abdomen. The blue pill was given to correct the secretions, night and morning, an epispastic applied to the epigastrium, and warm poultices to the abdomen. Ol. ricini, with turpentine, in small doses, sometimes epsom salts, used each day to act on the bowels, and spts. nitr. dulce as a diaphoretic. To the denuded epigastrium I applied on the 28th, 12 grs. of quinine made into a cerate with lard, and to my astonishment the fever appeared to be cut short on the 9th day after I was first called to see her. Her progress to health was from this time rapid. M. C., a sister of the above lady who had been much engaged in nursing her, after about a week of previous indisposition, was, on the 16th July, confined to her bed with continued fever. On the 17th, I found her with pulse considerably excited, though weak, tongue red around the edges, and furred in the middle, soreness in the back of the head and neck, soreness of the abdomen on pressure, sensation of roaring in the ears. This case was treated with blue pill, small doses of oil and turpentine, blister to the abdomen and fomentations, cupping the nuchæ, and sweet spts. nitre as a diaphoretic. She also had quinine applied to the blister, as her extremities inclined to be occasionally cold. About the 25th she became affected with complete aphonia and entire suppression of urine, to relieve which last, the catheter was used. Her symptoms having become so alarming, I sat up by her on this night, and closely examining her pulse, discovered a distinct intermission of her fever about 1 o'clock; when, on giving 8 grs. of quinine at the favorable moment, the morbid train of symptoms appeared to be broken up, and she commenced convalescing, although the aphonia continued complete for fully a week, when her voice was gradually restored. During this time she took quinine 5 grs. per day and oil and turpentine in

small doses, with the occasional use of the syringe to keep the bowels open. Her convalescence was slow, and she had to use the quinine every day for more than a month. Towards the last, triple doses of castor oil being required to keep the bowels open. After this her health became entirely restored.

Another variety of continued fever appeared in the case of a young man about 18 years of age, of scrofulous family, which came under treatment on the 2d of July. In addition to most of the symptoms common to the other cases, this patient was affected with profuse *diaphoresis*, continued uninterruptedly, his tongue *pale*. I put him on quinine immediately in doses of 5 grs. per day; an epispastic to the epigast. and kept the bowels acted upon by small doses of castor oil and turpentine, (a teaspoonful of the former to 4 gtt. of the latter daily,) and his convalescence was rapid and progressive from the first. There appeared in this case also the most marked improvement from the use of quinine applied to the blistered surface—which indeed seemed to cut short the fever.

On the 30th July, another somewhat similar case came under my treatment. In this the diaphoresis was slight, the tongue pale, but remarkably thickened at the edges; there was also soreness and stiffness at the back of the neck and head. Cupped after scarifying the nuchæ; epispastic to the stomach. For the first two days he took blue pill, after which quinine, 5 grs. per day and ol. ricini and terebinth. in above doses, or sal. epsom in small doses to act on the bowels; fomentations to the abdomen, which indeed I used in all cases. He recovered rapidly, and on the 12th August, I discontinued my visits.

Another case, about 22 years old, came under treatment about this time, and under a similar course to the above recovered. Three members of one family and five servants on one farm, were taken with this fever. Of the first three where cal. and blue pill were used as above, one died and the others recovered. The last five cases were treated with oil and turpentine as above, *alone;* no mercurial being given, and all recovered. In another family, two negro servants were taken with the same fever, (symptoms common to most of the above and diarrhœa the most prominent) one took one blue pill, the other two at the beginning, and afterwards a teaspoonful of castor oil with 4 gtt. ol. terebinth. daily, both recovered. These two also used spts. nitr.-dulc. and quinine.

In September last, at the residence of Col. Jno. S. S., this

fever at one time struck down some nine persons, and all the negro children, some ten or twelve, were simultaneously affected with diarrhœa and fever. Under treatment similar to the above, except that they took blue pill daily, four adults died and the others recovered. The children all recovered. I remarked here that the correction of the secretions by mercurials, although it appeared to abate the symptoms, gave no kind of assurance of the safety of the patient. The alvine discharges would in all the fatal cases appear good, thick, consistent and bilious, the diarrhœa apparently arrested; but the patient, when you were not anticipating it, would begin to sink, (after all his symptoms had improved) and in spite of tonics, stimulants, &c., continued to sink, until death closed the scene.

In October last, E. S., merchant, of slender frame, born in Bavaria, having previously for some time been exposed to the influence of a cold and damp atmosphere in his store, where he slept without fire, became affected with pains in his limbs, similar to rheumatism, little or no appetite, breath fœtid, and tongue a little red around the edges. In this condition he continued to go about and attend to his ordinary business for a week or ten days before confinement. On the 15th he took cal. et pulv. Dov. On the 16th, complaining of pain in the lower spinal region, he was cupped, took epsom salts and blue pill. On his breast and neck there were large yellow furfuraceous spots about the size of my hand, which he said had been there for six months, (probably syphilitic.) From the 16th to the 22d, he resumed his business, took no medicine, but still complaining of want of appetite, and general feeling of indisposition, his pulse now appearing to be considerably excited, he was bled, and took epsom salts in full dose. On the 23d, the salts not having operated, were repeated twice in the day, and at night a dose of castor oil given before any operation on the bowels could be obtained. On the 24th, he took in the morning an emetic of ipec., as he complained of slight nausea; this operated but partially; he then took cal. 10 grs. On the 25th the cal. not having operated, he took 5 grs. more, and had a blister plaster applied to the epigastrium. About 12 o'clock the calomel brought off a large feculent and extremely offensive evacuation, which as he had taken but little aliment since the operation of the oil, I judged must have been long retained in the convolutions of the intestines. The constipated condition of the bowels was now succeeded by that of slight diarrhœa; poultices were applied

as slight soreness was discoverable on pressure, and the blue pill and morphia given at night. In two or three days under this medicine and the application of the ungt. hydrarg. to the blistered surface, he was brought slightly under the mercurial influence, though his gums were neither inflamed nor tender; but his tongue had the characteristic appearance, and his breath the odour. His bowels were now kept open by the syringe used once or twice a day, and the acet. of morphia, in portions of 1-6 gr. given as occasion required when they became too active. Spts. nitr. dulc. as a diaphoretic, and to act on the kidneys, and occasionally a teaspoonful of ol. ricini, so as to confine his bowels to about two moderate discharges per day. Under this treatment he appeared to be mending, and could walk the room until about the 6th November, when late in the night he screamed out with a violent pain in his *heels.* A day or two after this he sucked the juice of two or three ripe apples, and drank some lemonade, which souring on his stomach, caused a relapse. On the 14th, in consultation with Dr. McK., of Richmond, it was resolved to give ¼ gr. muriate of mercury with 1 gr. pulv. Dov., 3 in die., and opiate enemas to restrain the bowels. His symptoms appearing to be rather aggravated, this prescription was, on the day following, abandoned. He had for some days been threatened with a bed sore from constant pressure on the nates, although his position was often changed to avoid it. On the 16th, from pressure during the night, the left buttock had a tumour as large as my fist, projecting as if drawn out by a cupping glass, which after being treated with camphorated liniment and other discutients, proceeded to ulcerate. On the 18th, Dr. Battman having been brought over by patient's brother from Cincinnati, prescribed 30 gtt. muriatic acid in an infusion. 6ʒ serpentaria, a large table spoonful to be taken every two hours. This was at 10 o'clock at night, and patient continued with slight intermission to take it until the third night. His lips, which had been rough, now becoming smooth—his tongue, which had been dry, becoming moist. But on the third night about 10 o'clock, the diarrhœa became urgent, with profuse watery discharges, which were arrested only by repeated opiates, both pr. oris and pr. anus. Up to this time he had continued free from *head ache.* There now appeared on all the left side of the abdomen large purple spots, (vibices.) The muriatic acid was discontinued. Involuntary discharges of urine and fœces commenced, and slight delirium occasionally appeared. Wine, quinine, ammo-

nia, &c., were resorted to with as little success as generally attends their use in sinking from exhaustion in typhus, and after lingering until the 29th, the patient sunk in a state of extreme emaciation. Two cases of the same fever have since occurred in the family where Mr. S. died, both having been much engaged in nursing him.

Having been satisfied from what I had witnessed that no advantage, but on the contrary, mischief is sometimes done by the mercurials in these forms of fever, I determined to dispense with them. Both of these cases like the former were for two weeks previous to confinement, subject to severe soreness and pains in the limbs precisely similar to rheumatism. Diarrhœa slight, head ache, red-edged tongue, &c., I put them each on a teaspoonful of castor oil, with 4 gtt. ol. terebinth. once per day, warm poultices to the abdomen, and occasionally spts. nitr. three times a day; bathing the extremities, and sometimes washing the entire surface with warm salt water, rubbing the abdomen and spinal column with ol. terebinth. If the tongue became dry or the pulse much excited, I gave a teaspoonful of epsom salts in place of the oil, &c. Under this treatment, the first which was taken down not long after the death of Mr. S., has entirely recovered, and the other now confined about four weeks is steadily convalescing. It is proper to add, the latter was bled at first for thoracic symptoms, and both were blistered over the epigast.

If I am asked why mercurials should be supposed to aggravate typhoid fevers, when they are of such well known efficacy in other forms of fever? (Here let me remark I have proved in my own case how hard it is for us to correct theories by the lights of experience.) I would answer, that all pathologists agree that the principal lesion characterizing this this fever is inflammation or ulceration of Peyer's glands. Connecting this fact with that also well known, that the mucous membrane of the bowels in a state of chronic inflammation is more subject to terminate in ulceration than any other tissue; let us consider the effects which would probably be produced by bringing a subject of this disease under the specific action of mercury. The chief agents engaged in the process of ulceration, are the *absorbents* which take away the solid structures and carry them into the mass of liquids. Now if we reflect in what a powerful degree the action of the absorbents is increased by mercury, need another word be said? And the practitioner, who while his patients with the diarrhœa arrested, the secretions restored and with fine bilious

discharges, has yet seen them sink and die in defiance of all tonics and stimulants, will no longer be astonished at the results. It might well be here considered too, what must be the effect on the inflamed, or ulcerated mucous surfaces of the constant passage of acrid bile, poured from the liver and gall bladder by the mercurial action.

In all the above cases the diet directed was rigid, as boiled milk, or rice water, but this direction was not always conformed to. Bathing the extremities and sponging was generally used. Salt and water, or weak lye having been the bath. The cases in which I derived the greatest benefit from the endermic use of quinine, as advised by some writer in the Lancet, were two in which the tongue was of deep red color, and four where it was pale, two of which, where it was remarkably so. The worst cases, and all the fatal, (except one in which it was pale) were red only on the edges and end, and in these especially I think any other than the *expectant* mode of treatment is hazardous! I have found rhubarb, although generally in small doses, a mild laxative, is not suited to this disease. Small doses of epsom salts, if they bring off one or two watery discharges, by acting as a local depletion to the phlogosed mucous membrane, have a tendency to remove this most formidable symptom, at the same time as every where remarked, they tend to leave the bowels costive. But as applicable to most cases, and perhaps to all, I am partial to small doses, a teaspoonful of castor oil, with 4 gtt. ol. terebinth. daily, and if the tongue should become dry, substitute a teaspoonful of epsom salts, which I have observed will in twenty-four hours restore its moisture. Spts. nitre as a diaphoretic and diuretic, warm fomentations to the abdomen, and salt baths to the extremities, with wet cloths to the head when headache occurs.

The effect of the turpentine is known to be salutary to ulcers in the bowels, and it is remarked by Dr. Dewees that when the yellow fever prevailed in Philadelphia, (in which disease inflammation of the stomach is the pathology) those cases which were bled and treated with turpentine recovered, and those treated otherwise, generally died. In increased doses, I have found it the best remedy in the tympanites, which frequently occurs in typhoid.

ART. III.—*A Report of Surgical Cases which occurred at Buena Vista, February 23rd,* 1847. By A. M. BLANTON, M. D., Surgeon, 2d Ky, Regiment.

Sanford Mayhall, corporal, company C., 2nd Ky. Infantry, on the evening of 23rd February, was run over by a lancer, who turned his horse, and gave Mayhall several wounds with his lance, one going through the arm, wounding the ulnar nerve, as is evinced by pain and paralysis of the ring and little fingers, and another piercing the parietes of the chest, between the 3rd and 4th ribs, and wounding the lungs. The ground on which he was lying was immediately deserted, both by our troops and the Mexicans, and in a few moments, he arose and walked several yards, frothy blood and air rushing from his wound at every act of respiration, and fell insensible into a ditch. He has no idea how long he remained here, but judging from the time the charge was made in which he was wounded, and the hour when the rain fell, (which falling in his face aroused him,) I would suppose, that it was upwards of an hour. He then got up and staggered several hundred yards to one of the batteries, where he was taken up almost fainting, and carried to the hospital. The surgeon closed the wound in his chest with lint and adhesive strips, and gave him laudanum and brandy to quiet his excessive restlessness, and to sustain his circulation. In a little while he became easy, and about midnight he was brought to Saltillo, and placed in the Cathedral, which was used as a temporary hospital.

24th—Doing tolerably well; air does not pass out of the wound; has a hacking cough and bloody expectoration; respiration abrupt, quick and hurried; pulse 100, but weak.

25th—About in the same condition as yesterday; no pain of consequence in his breast.

26th—Same condition—bowels opened.

27th—Was moved in a blanket a hundred yards to my hospital; he coughs constantly, and spits up blood, has pain in his breast, aggravated by inspiration; respiration and hurried pulse 110, but weak and thready; gave him at 10 o'clock, hydr. chlor. grs. iij, ipecac pul. grs. ij., morph. sul. gr. 1-6, to be repeated twice at intervals of three hours.

28th—Medicine has purged him, and enabled him to sleep nearly all night; says he is much better.

March 1st.—Not so well as yesterday; cough, pain in the breast, difficulty of respiration more urgent. About 4 p. m.,

was attacked, as he expressed it, with a new pain in his right breast below and about the wound, which continued to increase until 9 o'clock, when he was in great agony; he could scarcely pronounce a word, and breathed twenty-six times in a minute; cough aggravated, and pulse 115, but weak as it all along has been. Ordered him to take hydrar. chlor. grs. v., ipecac iij., morph. sul. gr. ½, to be repeated every two hours, until he was easy. Hot fomentations were applied to his breast, and his legs bathed in warm water. He took three of the above powders, fell asleep, and was quiet until morning.

2d March.—Says he is a great deal better, no pain scarcely, unless he takes a full breath; other symptoms improved; air has never escaped from the wound after it was closed. He is obliged to lie on his back, or the affected side.

From this day Mayhall continued to improve. His wounds were entirely healed by the 12th; and he had no bad symptoms, except these consequent upon the injury of the ulnar nerves, a short dry cough, respiration a little too much hurried, and entire inability to lie on the affected side, on account, I presume, of the new pleuritic adhesions becoming stretched in that position, and giving him intense pain about the wound.

On the 14th, he was attacked with a painful swelling of his left foot and leg, which disappeared after he was purged once, but on the 20th it returned with great severity, and extended up to the hip, giving him intense pain every evening from 5 to 10 o'clock. There was no derangement of the digestive or sanguiferous systems, nor was the leg unnaturally warm or sensitive.

Put him on good diet, porter, iron, and quinine, and opiates to relieve his great suffering; and used hot fomentations and flannel bandage on his leg, by which treatment he is now, April 4th, nearly well, not only of his swollen leg, but also of of his hacking cough and other unpleasant chest symptoms. He still suffers, however, as much as ever from the wound of the ulnar nerve.

July 28th.—I saw Mayhall yesterday, and he is not yet entirely relieved from the injury of the nerve, though he is working at his trade.

On the morning of the 23d February, when the left wing of our army was compelled to fall back, Lieut. John Merrifield, Ky. cavalry, before his regiment had moved a hundred yards, was shot through the arm. The ball entered posteriorly, about two inches above the insertion of the deltoid mus

cle, passed through and cut the brachial artery on its axillary side. A tremendous hemorrhage ensued, and he came directly to me, not a dozen yards distant. His danger was evident, and he was directed to gallop to a ravine a few paces in front, out of reach of the bullets; but when we had reached the place, before I could take hold of him, the regiment was parallel with us, and the Mexicans in the rear and firing, so as to render the position untenable. I now directed him to bear off to the left from the line, that every one else was taking, and running another hundred yards, we got behind a little hillock, when I took hold of him, and he fell across my horse's withers, unable longer to maintain his seat unassisted. I pinched up his coat sleeve, on each side, so as to make two compresses, pressed them against each orifice, and applied a roller from the elbow up as tight as I could draw it. After the roller was four or five layers thick, the hemorrhage was entirely arrested, before which his blood was dripping fast from my horse's fetlocks, having saturated the end of the saddle blanket and his mane. We were now obliged to move immediately, and after going a short distance, I discovered that he revived and would be able to reach the hospital, three hundred yards off, so it was pointed to him, and I rejoined the command to which I was attached.

He reached the hospital, was taken from his horse, and detailed the nature of his wounds, when one of the surgeons applied a very tight roller from the hand to axilla, without a recurrence of the hemorrhage. I did not see him again until the 25th, he was doing very well with the first dressing untouched; pulse at the wrist imperceptible.

Nothing of any interest afterwards occurred in this case, except that a pulse in the brachial and radial arteries could be felt faintly beating, on the 2nd March, which gradually strengthening, is now, (April 1st) nearly as strong and full as that of the other arm. About an inch above and below the wound the artery does not appear to contract, but to let the blood flow on through it without interruption.

In the above case, I am certain that the brachial artery was cut, perhaps half of its circumference; that the amount of blood lost, under other circumstances, would have caused the man to faint, before we had stopped, but his high state of excitement enabled him to bear the copious hemorrhage; that if the wound had been made by a cutting instrument, he would have died anyhow, but the life or contractility of the artery was destroyed by the ball; that the circulation in the

artery for a few days was nearly arrested; and finally, that the wound healed, the artery gradually regained its tone and the blood circulated in it as before.

Ward, of Capt. Joyner's company, 2nd Ky. Infantry, was struck in the evening of the 23d February, at the battle of Buena Vista, by a roundshot, which shattered his right arm immediately above the elbow, passed across his body, striking very obliquely the chest above the left nipple, making an eschar three inches in diameter, and tore the muscles from the interior of the left humerus, from the insertion of the latissimus dorsi down to within one inch of the elbow. I saw him and took him to my hospital, on the 27th, and unwrapping his wound, discovered the bone, to the extent mentioned above, laid bare, about one half of the flesh on the arm the same distance gone, the large nerves not cut, but apparently stretched, the humeral artery and vien entire, and but the circulation in them suspended; and at the upper extremity of the wound, a flap three inches long, and two inches wide, consisting of skin, fascia, portions of coraco-brachialis and biceps muscles, hanging free. The base of this flap was about an inch below the shoulder joint. The ulna was also laid bare, at the root of the olecranon process, to the extent of a ten cent piece, done, I presume, by a button or spicula of bone from the other arm.

The periosteum at this point suffered, and thin scales of bone were knocked up, but not detached. The forearm and hand had almost their natural warmth, but possessed scarcely any sensibility, and no motion, and there was no pulse at the wrist.

The other arm had been amputated on the field, and as the man's color and appetite were good, and he very much objected to the loss of the remaining one, I determined to attempt its cure.

A light dressing of patent lint, spread with simple cerate, was applied to the wound, and the hanging flap was kept in the proper place by a roller loosely applied. For several days the wound underwent no change, except that small sloughs would form at various points and fall off.

Tuesday, 2d March, discovered a very slight pulsation at the wrist.

3rd.—On removing the dressing discovered in several places amongst the sloughs and sanguineous discharge, healthy pus, and also portions of the wound having a red promising appearance.

4th.—The major portion of the wound is freed of its slough, the edges and end of the flap being yet covered with it; patient remains in good health and spirits; appetite good; diet—tea, light bread, soup, &c. Dressed him at 5 o'clock, p. m.; at 10, was summoned in a hurry to stop a copious hemorrhage. Took off the dressings directly, and found the blood (arterial) to proceed from a point high up under the base of the flap, from (as I supposed) the anterior circumflex artery. Tried the exposure of the wound to cold air, and sponging with cold water, for several minutes, to no purpose, and then dipped a pledget of lint in a strong solution of creosote, and thrust it up as high as possible, to the point, from whence the blood flowed. The artery could not be seen or reached except by a good deal of cutting.

After placing the pledget of lint, I re-adjusted the flap and held it in its position by a roller very tightly applied. The hemorrhage was arrested immediately; pulse at the wrist perceptible, but the humeral artery, which I took between my fingers for four or five inches, was motionless. To prevent œdema and give support to the circulation, a roller was firmly applied from the fingers up. I was satisfied that a collateral circulation sufficient for the nutrition of the forearm, had been established, and all to be feared was, secondary hemorrhage, and the exhausting effects of extensive suppuration. It was the opinion of many who saw the case, that the man would inevitably die from the former of these causes, and they urged immediate amputation as the only course to be pursued; but I declined resorting to this measure until forced to it by an uncontrollable bleeding, when it was designed to amputate at the shoulder joint. A nurse was directed to keep his eye constantly on the arm, and report immediately the slighest hemorrhage, if it should occur.

On the 5th, twenty-four hours after the previous dressings, the wound was again stripped, the pledget of lint carefully removed and the arm dressed as before; with the care of applying the roller on the hand and forearm and around the flap very tight. The whole surface of the sore has commenced suppurating, and granulations are sprouting; there is, however, a slough or eschar at the end of the flap.

6th.—Suppuration great; the flap has commenced adhering; pulse strengthening; wound clear; dressing as before; a generous diet of eggs, milk, soup, &c., allowed.

The wound continued to improve, and under the same treatment, until the 9th, when I was called up about midnight

to stop a bleeding. I found that arterial blood had run through the dressings and dripped to the amount of two or three ounces on the sheets; but it looked as if it had been exposed some time, from which I inferred that the bleeding was spontaneously checked, and therefore only applied a roller, with additional force over the first dressing, and left the patient with an order to the nurse never to take his eye from the arm.

The granulations now sprung up with an extraordinary rapidity; by the 14th, the bone was covered and flap entirely adhered; on the 17th, the vessels and nerves were hid, and the granulations over a fourth of the wound, next to the edges, sufficiently prominent. Discontinued the tight roller several days; patient's strength greatly improved, walks about and sits up six hours each day; diet very liberal.

18th.—Swelling about the elbow; patient complains of considerable pain from the wound on the ulnar, the cause of the swelling; picked away several small scales of bone and dressed with a bread poultice, using on the main wound a loose dressing of lint.

20th.—Still complains of pain about the elbow; swelling here is considerable; applied a roller firmly from the hand up, pressing the swollen part as tightly as he would bear it, and directed the part to be kept wet with warm water.

21st.—Swelling and redness of the elbow nearly gone; for the first time, says that his fingers and hand hurt him; nerves recovering their sensibility.

22d.—Bread poultice on elbow.

23d.—Inflammation gone; the ligamentous prolongation of the triceps muscle at its insertion coming away by sloughing; granulations filling this little wound; complains of pain in his fingers and hand; gaining flesh and strength daily; has never taken any medicine except several laxatives and as many opiates. From this time, Ward did not suffer at all—his wounds now, 8th May, are nearly healed, but he has not a particle of motion in his hand.

May 15th.—Left Saltillo in a common wagon, and stopping at night, was surprised to find he could move his fingers; the jolting had acted as a nervous stimulant.

I saw him last on the 28th May; his wounds were well, and the power of moving his hand, was daily becoming greater; but the stump of the other arm was ulcerating, on account of the surgeon cutting his flaps too short, so that the poor fellow will have to undergo another painful operation.

This defect I have endeavored to remedy by pushing the muscles ahead of a bandage applied from the shoulder down, but after they were left free they contracted, and the above unpleasant result followed.

ART. IV.—A *case of Aneurism of the Aorta, simulating disease of the Lungs. Fatal from its rupture into the substance of the Lungs.* By P. J. BUCKNER, M. D., of Georgetown, Ohio.

Aaron Tuison, a yellow man, and barber by trade, the subject of the disease under consideration, was about forty years of age, had prominent abdomen, thick lips, and might be said to be of scrofulous diathesis. He had, when about nine years of age, an attack of paralysis of the right leg, which rendered him lame in that limb, from atrophy and loss of power in the muscles. He had, also, varicose veins, and a chronic ulcer of his left leg, which otherwise was well developed. He informe me that all his brothers and sisters died before the age of puberty, and one of them from hemorrhage of the lungs.

My first acquaintance with him was about two years ago. He then resided in Ripley, ten miles distant from this place, and consulted me for a supposed disease of the lungs. He had asthmatic cough, with expectoration of viscid transparent mucous, complained of tightness of the chest, and fugitive pains of the thorax, sometimes in the sternum, at others in the left side and shoulders, under the scapula, etc. He informed me that several physicians had examined him, and pronounced his disease incipient Phthisis Pulmonalis.

I examined his chest by *auscultation*, and found the vesicular respiratory sounds throughout, of a perfectly normal character; yet upon *percussion*, the resonance was rather dull in the lower lobe of the left lung. I could not, however, detect any thing indicative of tubercular deposit, and declared, as my opinion, that he was *not* laboring under tubercular disease.

Sometime after, he moved to Georgetown, and was about in the same situation as when I first saw him. The ulcer of the leg, however, had grown worse, and he put himself under my care. In a short time the ulcer healed, and I heard nothing farther of his history until about a month before he died. About the first of June, 1847, he informed me that his cough was worse, and that he expectorated more abun-

dantly, a tough glairy mucous, occasionally opaque but not purulent. The pains of the chest were more constant and severe, but still not confined to any particular point. Sometimes they were in the breast, shoulders, sides, between the shoulders, and particularly in the back of the neck producing a sense of stiffness, at other times they were in the region of the liver and stomach, running along the margin of the diaphragm to the spine. His tongue was slightly furred, with a white cream coat—bowels rather inclined to constipation, with variable appetite. Another symptom, not least in the series, was a *diffused* pain in the breast, and sense of suffocation at night, so urgent as to compel him to quit the horizontal posture, and sit up for a good part of the night.

Several times during the month of June, I made stethoscopic examinations of his chest, and always found the respiratory murmur clear in the apex of the lungs, where we generally expect to find indications of tubercular deposit, if they exist at all. I consequently could not change the opinion that I had given upon a former occasion, that there was no tubercular disease of the lungs. I examined the heart, and once I thought I detected some abnormal sound, and remarked to the patient, that there might be some disease of the heart. Having but little experence in the sounds of the heart in a state of disease, I did not feel satisfied that I was prepared to make a critical diagnosis in diseases of that organ. I therefore lost sight of the heart as the seat of the disease. Candor compels me to state, that I never once suspected the existence of aneurism of the aorta.

From the anomalous character of the symptoms, and the want of a clear diagnosis, the treatment was merely palliative. I administered laxatives to regulate his bowels, enjoined upon him low diet and quietude, and gave the following pill three times a day:

℞. Quin. Sulph. grs. xxiv.
Zinc. Sulph. " xii.
Morph. Sulph. " iv.

Aqua distillatæ q. s. Fiat massa in pilulas xii. dividenda.

Under this treatment he had a diminution of pain, and rested better at night; the cough diminished, while the secretion of the mucous was very manifestly lessened. The case went on, however, with no material change, until the 28th of June, when he was attacked with profuse hæmoptysis. Dr. T. M. Tweed, my partner, was called to see him, and pre-

scribed acetate of lead and ipecacuanha in full doses, enjoining absolute rest and abstemious diet. The hemorrhage was soon arrested. The discharge of blood in this attack amounted to sixteen or twenty ounces. As it was pure florid blood, and spit into a vessel, the quantity was pretty easily estimated. He continued the use of the lead and ipecac. until the 3d of July, when our patient, to all appearances, was much better. Indeed, he said that he was much better than he had been for a long time. During the day, however, while shaving his customers, he had frequently to sit down to relieve the pain in his breast. After being seated for a moment, he would resume his labor. About twilight I was called to visit him in great haste, the messenger stating that he was bleeding to death. Upon my arrival I found the patient quite exhausted from the immense loss of blood. I administered the usual remedies in cases of hæmoptysis, applying cold to the chest, and sinapisms to the feet, when the hemorrhage, to a great extent, ceased. His extremities, and general surface were quite cold, and drenched in perspiration—the breathing laborious, and pulse almost imperceptible at the wrist. The quantity of blood discharged at this time, could not have been less than half a gallon. On the next day, our patient complaining of pain in the left side, a large blister was applied to that portion of the chest. From this time, up to the 9th, he continued to improve, expectorating a viscid mucous, tinged with blood, and occasionally coagula without any admixture of mucous. His pulse, in the meantime, was rather irregular, and preternaturally slow. On the morning of the day he died, it was beating not more than forty to the minute.

On the 9th, about six o'clock in the evening, Dr. Tweed visited the patient, and just as he had finished dressing his blister, he commenced coughing. He immediately raised upon his elbow, and spit upon the floor a mouthful of clear blood. The Doctor had scarcely reached for a vessel at the foot of the bed, when from nostrils and mouth a perfect torrent of blood gushed forth—the patient gave two or three convulsive struggles, and in less than three minutes was a corpse.

Autopsy, thirteen hours after death.—Upon opening the thorax, we found both lungs excessively engorged with blood. Extensive adhesions had formed between the pleural membranes, but they were evidently the result of inflammation occurring long before death—possibly years ago. The cavity of the chest contained a large quantity of coagulated blood.

Upon examination of the heart, we found it flaccid, and entirely empty. Tracing the aorta about four inches below the arch, we found a large aneurismal sac, communicating with the lower lobe of the left lung. Firm adhesions had formed between the pleura pulmonalis and coats of the aorta, and as the aneurism had advanced in growth, its walls had become attenuated, until at last it had burst into the substance of the lung, suffocating the patient almost instantly. Thus was the immense gush of the blood from the lungs accounted for. *Technically*, it was not a case of hæmoptysis; and yet, without a post mortem inspection, we would have remained forever under the conviction, that it was a true case of hæmoptysis, although a very extraordinary one.

Another remarkable fact was developed by the autopsy, viz: The adhesion of the aorta to the heart itself. While the adhesion of the sac to the lung was evidently of long standing from its firmness and the identity of structure, the adhesion of the opposite side *to* the heart was of more recent date, as was evinced by its being easily separated; presenting the rosy tint of recent inflammation, and the fleshy granular appearance of recently organized lymph.

Whether the aneurism had partially burst into the cavity of the chest; or whether, in separating the adhesions between the pleura, we had ruptured the lung, and thus discharged a portion of the blood into that cavity, I am not prepared to state. A difference of opinion upon this point was expressed by the medical gentlemen, who witnessed the dissection.

Notwithstanding the symptoms during life, bore so striking an analogy to disease of the lungs, that several respectable members of the profession pronounced it a case of phthisis, not a trace of tubercles was found, and not a single evidence of *recent* inflammation.

From this case four very important inferences may be drawn, viz:

1. That aneurism of the thoracic aorta may be taken for pulmonary disease—many of the symptoms of the one being common to the other.

2. That the rupture of an aneurismal sac, even of so important a vessel as the aorta, is not necessarily fatal at the instant—the patient fainting, the aperture may be plugged with coagulum. "The patient thus may rally, to perish by a return of hemorrhage."

3. That nature makes an effort towards repairing the organic lesions. In the present instance this effort was

evinced by the deposit of concentric layers of nearly colorless fibrin upon the internal walls of the sac.

4. That aneurism of the thoracic aorta may terminate by bursting into the substance of the lungs. The records of medicine furnish but few instances of this termination. Laennec witnessed but one case of this character. Mackintosh has observed three.

NOTE.—The case detailed above presents another very singular feature. In all probability, there was engorgement of the lung from the 28th of June, the time of the first hemorrhage, to the 9th of July, the day of his death—*certainly*, there was engorgement after the 3d of July. On that day, the air vesicles, and structure of the lung, must have been broken down by the gush of blood from the aneurismal sac—the interstitial structure must have been filled with extravasated blood, similar to that found on inspection after death; yet from the first hemorrhage to the last, a period of eleven days, no unusual or untoward symptoms made their appearance, nor was there the evidence of that active inflammation which we would naturally expect from so extensive a lesion, of so delicate a structure as the lungs.

ART. V.—*Thoughts on Factitious Diseases.* BY L. FIRESTONE, M. D., of Congress, Ohio.

In reading the pages of the "*Lancet*," I have noticed the history given of epidemic, endemic, and sporadic diseases, which pervade different sections of the country; but I do not recollect of having noticed any remarks which have been made upon a very common affection, which has slain, or been the means of slaying its thousands, namely, *Factitious Disease.* It will be admitted that an understanding of this is every way important, especially to young men in the profession, for in many cases, either from not having a correct knowledge of the therapeutical properties of medicines, or from carelessness, remedies are given which either coincide with the disease affecting the patient, or they produce disease much more fatal in its character, than the original malady. It is very common for the people, and frequently with physicians, to inculcate the idea when about to administer certain articles, "that if they will do no good, they will do no harm." This is a very dangerous position to be assumed by any one, and certainly

the last that should be taken by the physician; for if medicines are not rightly prepared and judiciously administered, they are just as likely to do a great amount of harm as they are to do any good; and for this simple reason, all medicines have some action upon the animal economy, both in health and in disease, and that action, if it will not alleviate the complaint for which the article was administered, will neither coincide with it, or produce a new diseased action, which in the majority of cases is much worse than the primary affection.

I shall in this article consider the coinciding tendencies in the same light as facititious disease; and I would here say, that as little space as there is allotted to me, it is not to be expected that it will be in my power to present the various modes, in which factitious disease is, or may be produced, but shall only offer a few thoughts upon those that are the most common.

In the first place, remedies will coincide with disease, if not used in the proper grade of diseased action. This position, of course, will be admitted, although in many cases it is entirely overlooked. Thus in the disease cynanche tonsillaris, or a simple case of ophthalmia, it may be necessary during the treatment to apply stimulants locally, for the purpose of stimulating the vessels of the part to throw off the superabundance of blood which accumulated during increased action, and thereby enable them to resume their healthy functions; for this purpose, in the first affection, particularly, we recommend gargles of capsicum, ammonia, or muriatic acid; but it is plainly to be seen, that these remedies should only be prescribed after the inflammation has been subdued by other agents; and if given before this has been accomplished, they will not only fail in producing relief, but will coincide with the disease already present. But it is not to be supposed that the above diseases are the only ones in which we should be cautious in administering excitants; but in all acute diseases, as a general rule, we should trust to another class of remedies in order to affect a cure. It then becomes necessary for the physician to be careful, lest in the improper administration of stimulants or excitants, factitious disease is the consequence, to the great detriment of the patient, and the mortification of the physician.

Second.—Remedies will coincide if not used in the proper *stage*, of disease. This will apply more particularly in intermittent and remittent fevers in the treatment of which tonics are the sheet anchors. Yet, if the physician is so imprudent,

as to administer quinine, or the arsenite of potassa, in the hot stage of an intermittent fever; he will not only have the mortification of learning that the remedies which he has administered will coincide, but he will be very likely to factitiously produce inflammation, which will baffle his skill in such a way, that it can be no longer sung by Ocyrrhœa, that he "shall heal all nations and defraud the tomb."

Third.—Remedies will coincide if their powers are too great for the vital energies of the patient.

This is a very important matter to be attended to, especially in the treatment of chronic diseases; for if invalids are worn out by some long standing chronic affections, and the vital energies considerably below par, as a matter of course they will be unable to bear strong potent remedies that would be indicated, were the disease of an acute character. In the treatment of chronic diseases, we should be as miserly as possible, that is, we should hold all the vitality we have in our possession, and obtain as much more as possible. Thus in the treatment of chronic affections of the stomach, intestinal canal, liver, peritoneum, heart, lungs, or of any organ, or viscus, in the system, we cannot employ the same remedies in safety that would be indicated for diseases of the same parts that were of an acute form, but we must select those of a different character or at least those whose action is not so active; and, hence, we resort to revellents, and often combined with bitters or mild tonics.

Fourth.—Remedies will coincide, or produce factitious diseases, if not combined with proper substances. Fowler's Solution, or the arsenite of potassa, is admitted to be an excellent remedy for intermittent fever, and is also recommended for many cutaneous diseases; but if given without being combined properly, may produce nausea to such an extent that it is impossible for the patient to take it; hence it often becomes necessary in many subjects to add a little tinct. opii., for the purpose of correcting this tendency. There are many physicians, I find, who strenuously condemn the use of this potent remedy from this fact, which objection would vanish in an instant, did they but observe this simple precaution.

We find, too, in administering the acetate of lead, that it is best to combine a little opium, to prevent the evil tendencies it has in producing severe griping pains in the bowels. A young physician of my acquaintaace, during the last summer, was attending a man who had an obstinate attack of hæmoptysis; he found it necessary during his attendance to adminis-

ter a considerable amount of the plumbi acetas. I was called in consultation, and on my way I supposed he wanted my advice upon the primary affection, but to my surprise on my arrival, I found the man laboring under a severe attack of calica pictonum, of which his life was despaired, though he ultimately recovered. The good effects of the opium probably arises from the impression it makes upon the nerves of the stomach, thereby preventing the evil tendencies of the lead. Since that, he has had a return of the hæmoptysis, for which he has taken the plumbi acetas combined with opium, without any bad effects. We find, also, that in administering the plumbi acetas, if we add a little acetic acid it will prevent any mischief following. The rationale of this appears to be that the acetate scarcely ever produces bad effects in the stomach, unless chemical decomposition takes place, which changes the acetate into the carbonate of lead, which by the addition of a little acetic acid is prevented; and it is often better to add the acid than give the opium, particularly where, owing to some peculiar idiosyncrasy, the latter article does not agree with the patient.

Fifth.—Factitious disease is often produced by a mistake in diagnosis. Giving medicine at hazard cannot be too deeply deplored by the physician, both for the honor of his profession, and for the safety of his patients. It is a common practice with some physicians to give some medicine when they are called, no matter how ignorant they may be of the nature of the complaint. This will apply more particularly to those imposters known as members of the "thunder and storm" system, alias Thomsonians, who, in a general way, are as ignorant of the laws of life, disease and therapeutic remedies, as a Hottentot is of civilization. It is plainly to be seen, that such a course can be but attended with the most fatal consequences, and it is better at all times for a physician to acknowledge his ignorance, and advise the employment of abler medical aid, than thus pursue a course which must in a majority of cases be attended with calamitous results.

Sixth.—Remedies will coincide with, or produce factitious disease, if continued beyond the proper time, or given upon trivial occasions. Since the introduction of so many quack nostrums, we find many families who have become their own doctors, and have any amount of patent pills, which they swallow to an extent that would be entirely incredible, had we no other specimen of public gullibility. We have a host of would-be doctors, who have not been able to live by pursuing an

honorable course in the profession, and as a last resort have compounded a lot of stuff which they call patent medicine, or patent pills, and have offered them to the public as agents, that will enable the "deaf to hear," the "lame to walk," and the "blind to see." Further than this, we have another class who perhaps have not the impudence to compound these agents, and recommend them to cure all manner of incurable diseases, but who nevertheless keep them for sale in their offices, or prescribe them to their patients. Hence we find in their possession, *Moffat's pills, Brandreth's pills, Snyder's pills, Resurrection pills, Oriental pills, Life Preserving pills, Bilious or anti-bilious pills, Pills good for the Constitution or "that which constitutes,"* and a host of others, "too tedious to mention," which are recommended to the public to cure all diseases, from *phthisis* down to *scabies.* And what is more absurd than all is, they are recommended to take of these pills, day after day, and week after week; and if they obey the directions, can we be surprised that they produce factitious disease! Produce to me a physician who compounds, or who even keeps and recommends to his patients these patent nostrums, and I will guarantee that man to be a quack and an impostor; and show me a family who is in the habit of using these nostrums, and I will show you a family of invalids. Need we be surprised to see our friends walking the streets with pale faces, and complaining of liver complaints, consumption, dyspepsia, and of irritation of the entire course of the intestinal canal, after having swallowed quarts of pills, and taken bottles of panaceas, which instead of removing a simple complaint which would have yielded to judicious treatment, or to simple dieting, have produced factitious disease, often of an alarming character. But cathartics are often improperly administered by others than those of patent medicine notoriety, for we have physicians who in the treatment of common bilious remittant fever, administer cathartics to an extent well calculated to coincide with, or produce factitious disease; thus when giving calomel, or any mercurial preparation, they administer from fifty to sixty grains; and that amount perhaps every day, or at least every third day. The advocates of large portions of calomel claim that it must be given so as to effect the liver, and thereby produce biliary discharges; and after biliary evacuations have thus been produced, they then argue that they must be given until they cease. With regard to the first, it is true they may become necessary to change the secretions, but it does not necessarily follow, that to do

this they must give such mammoth doses; and as regards the second position, it is untenable, for the calomel which has been taken in large doses, produces quite a degree of irritation of the mucous membrane of the stomach and upper portion of the intestinal canal; this irritation is conveyed by sympathy of continuity along the biliary ducts to the liver, and there produces an inordinate action in that gland which brings about excessive discharges of bile, so that instead of being an evidence of a crisis being produced by such an amount of bile being discharged, it is only an evidence that the mercurial has been carried to too great an extent, and this abundance of biliary matter is the consequence. But in addition to this, owing to the large portions of mercury, irritation of the intestinal canal may be produced factitiously which will be a complication not to be desired. If, instead of such large portions of mercury, followed by drastic purges, (as they often are) the patient would take some mild aperient, with a refrigerant plan adopted, fevers which are frequently complained of as being of difficult management, would yield without much trouble. We have another set of would-be doctors, who, it is true, do not give cathartics to this alarming extent, but who do, if possible worse, for they are constantly dosing their patients with lobelia inflata as an emetic, and this active agent is given, too, without regard to any particular pathological change; for it matters not whether a man has consumption, dyspepsia, dropsy, or in fact, whether there is any disease at all, it is advisable in their opinion to take lobelia at any rate, in order to vomit the "bile off their stomach," and thereby either cure the disease or prevent their occurrence. It is very evident that their *bile argument* is just as absurd as our *cathartic men;* for from the excessive use of emetics the reversed action of the stomach is conveyed to the duodenum, and along the biliary ducts, and they have an excessive discharge of bile in consequence of giving too freely of their lobelia; and instead of being looked upon with delight, their emetic should be discontinued, for they certainly produce factitious disease.

Seventh.—Remedies will coincide from mental causes. This is a position that every practitioner of experience will accede to at once; hence it becomes necessary for the physician, in many cases, notwithstanding his prescriptions may be scientific and judicious, to revive the drooping spirits, or the patient will sink under the best management on his part. It is admitted to be rather an unfavorable prognosis when the

patient has lost all hopes of recovery. Hope is one of our best mental tonics, and is calculated, in many cases, particularly in nervous individuals, to be of nearly as much service as therapeutic remedies; therefore, it is necessary that the physician be cautious lest by his own management the patient lose all hope, which is "the sick man's health." Armstrong has it beautifully expressed in the following lines:

> "Whatever cheerful and serene
> Supports the mind supports the body too—
> Hence the most vital movements mortals feel
> Is hope, the balm and life-blood of the soul—
> It pleases and it lasts."

There is nothing of a more depressing character to the patient than to be told by the physician that there is no hope; even this will have a tendency to coincide with disease, and is an expression that should be made with great caution by the physician. And even where the patient has lost all confidence in his attendant, it is advisable for the physician to leave off his attendance, and allow the patient to chose another in whom he can put greater confidence.

ART. VI.—*Tumefied os Uteri.* By A. E. BROCKWAY, M. D., of Ashford Springs, Sumpter county, Southern Alabama.

A black woman, aged thirty-six, who had had six healthy children, in July, 1846, menstruated for the first time after the birth of her last child, which at that time was 8 months old. The next period came without the appearance of the catamenia, and soon after she complained of some unusual and disagreeable feeling in the region of the uterus, accompanied with some swelling, and high colored urine, producing a burning sensation when voided.

This condition of things gradually became aggravated, till November 1st, at which time I was called to the case; she having the appearance of being seven months in pregnancy. Complained a great deal of a dull pain in the lower part of the abdomen. On examination it appeared to be a collection of fluid only, in the abdominal cavity. I treated her ten days for ascetes, (consequent as thought upon amenorrhœa) which made no impression, with the exception of some mitigation of the burning sensation on avoiding urine. Hence my next opinion was, that the trouble was principally confined to the

womb; and on examination per speculum, I found my suspicions verrified. The neck of the uterus being very much elongated and enlarged to about four times its natural size, having the appearance of a membranous sack distended with fluid. The os tincæ being sufficiently dilated to admit a probe the size of a goose quill, with which I explored the cavity of the organ to the distance of eight inches without any difficulty. I punctured the os uteri with the point of my lancet, with the view of discharging the morbid accumulation of serum, as I supposed. But quite to my surprise, a stream of blood followed, spirting clear of the speculum, into the cup. I let it run ten ounces, then withdrew the speculum, which checked the blood. She expressed a good deal of relief from a painful feeling of distention. During seven weeks from that time, I took one gallon of blood from the womb by making small punctures of the os uteri with my lancet. In three instances I took a pint at each drawing. She expressed relief at each time, and was not any weaker from the loss of blood. After the fourth qt. was taken, I could distinctly feel through the walls of the lower part of the abdomen, a movable body, about the size of my fist, which was sufficient evidence of abnormal pregnancy, as connected with the foregoing symptoms; which was suspicioned at first, for the reason that I could not conjure up any theory that would account so satisfactorily for the effusion of blood but interstitial pregnancy; the developement of the fœtus causing a rupture of the adjacent vessels, and consequently effusion into the cellular tissue. At the seventh week, I surrendered the case to nature, being quite well convinced that the above conditions of things existed, consequently gave but little encouragement as to the termination of the case; feeling quite sure it would terminate seriously.

In January following labour came on, and after six hours of unusually severe uterine contraction, she was delivered of a sprightly seven months' child. Both of which have been doing well ever since. The fact that the taking of blood gave relief, induced me to persist in the practice as long as it produced no bad symptoms, and not knowing the cause of so much effused blood, and thinking that this peculiar condition, might be superinduced by a derangement of the catamenial function. Hence, one principal object was, in treating the case, to dispose of this stagnated blood and restore the menstrual function, &c. The true pathology being so obscure, I knew not what else to do.

I would mention, that there was habitual constipation and leucorrhœa, during the pregnancy. And that the symptoms common to her former pregnancy, were generally absent.—Hence she did not suspicion that she was pregnant. A number of queries necessarily arises in this case, which I will leave you to suggest and answer, if you please.

ART. VII.—*Treatment of Intermittent Fever.* By J. C. GRAY, M. D., of Mount Vernon, Ill.

The prevalence of intermittent fever throughout the great Mississippi Valley; the high price of quinine, and the frequent scarcity of the article, should make it an object of no small importance to physicians to lay hold of any medicine, or combination of medicines, that could claim a place even as a substitute for quinine—acknowledged, as I believe it is by every practitioner, to be the best, and safest remedy known in the treatment of intermittent and remittent fevers.

Arsenic, also, has long been held in high estimation in the treatment of this class of diseases; but the virulence of the poison when administered in an over dose, has deterred many from using, or prescribing it at all. And I confess that my experience with the article was very *limited*, until necessity compelled me to search for some remedy, as a substitute for quinine and barks; and after trying almost every thing I could think of in the mineral, vegetable, and animal kingdoms, from the sulphate of zinc, to *spider's web;* I at length, with a cautious trembling hand, and many a heavy *sigh*, prescribed *Fowler's solution.* Giving very particular directions, and telling my patient the consequences, should he take it too fast, or two much at a time, and that he must take every dose by the clock, and not vary five minutes either way.

I believe he followed my direction to the very letter; the result was, he was cured, and that too without any unpleasant symptoms. During that season, I prescribed either the solution, or the acid in pills, to a number of patients, without a single bad effect, except in three cases; and in these, extreme nausea, and a sinking feeling at the epigastrium, were the symptoms present. These, however, all subsided in a few days, without leaving any traces of the poison.

For the last four years, I have given the arsenic in combination with creosote, and I can safely say, that I have never known any unpleasant symptoms to follow its administration, since I adopted this course.

The symptoms to indicate to us a discontinuance of the arsenic, it will be recollected, are: œdema, itching of the skin, and a disturbance of the stomach and bowels. When this is the case, whether brought on by arsenic or other causes, I know of no better remedy than creosote, either alone, or combined with some narcotic. Now, if the creosote will control these symptoms when they exist, why may not it contribute to prevent these occurrances, and thus far prove an *antidote* to the poison.

The following are the recipes I usually employ:

℞. Arsenic alb. grs. ii;
Pulv. opi. " iii;
Pulv. pip. nig. 3ss.;
Castile soap, grs. x;
Creosote, gtt. v;
Ol. pip. nig. q. s., to form mass, divide into

Forty pills. Dose one every two hours, during the apyrexia of intermittents. Or,

℞. Fowler's solution, gtt. lx;
Tr. opii, - - gtt. xxx;
Spt. lavender comp. 3i;
Infus. prun. virg. 3iij;
Creosote, - - - gtt ij;

Dose, a table spoonful every two or three hours.

PART II.

REVIEWS AND NOTICES.

ART. VIII.—*A Treatise on the Practice of Medicine.* By GEO. B. WOOD, M. D., Professor of Materia Medica and Pharmacy, in the University of Pennsylvania; one of the Physicians of the Pennsylvania Hospital; one of the Authors of the Dispensatory of the United States of America, etc. In two volumes. *Philadelphia:* Grigg, Elliott & Co. 1847. pp. 791, 840.

This book has come upon the profession very unexpectedly. No notice was given of its approach; or, at least, if a messenger was sent out to herald its advent, he did not reach the far west; hence our surprise at finding upon our table two ponderous tomes on the Practice of Medicine by Professor Wood.

The first thought that will occur to most persons, when a new work is announced, is, whether such a treatise is required by the condition of the profession. We are inclined to the opinion, however, that this is an illiberal view of the subject, and, if strictly conformed to, would produce disastrous results; it would limit the investigations and labors of competent writers, and would result in producing a stationary condition of science. We are of opinion, therefore, that an author should not be censured for presenting a new book, even on a subject which can boast of its scores of treatises; for no work however meager and faulty it may be, will be entirely destitute of some redeeming or even valuable traits, which may serve to extend our knowledge of the subject.

The practice of medicine, even in this country, is not deficient in the number of its books. There is Dunglison's Practice, Bell & Stokes' Practice, Condie's Watson, Eberle's Practice, Dewee's Practice, and many others, either systematic treatises, or practical works on special subjects; and if we add to this the many foreign works which have gained circulation among us, it can scarcely be supposed that Dr. Wood could

have been urged to his task by a very obvious deficiency in this department.

But notwithstanding no unoccupied ground was left, yet Dr. Wood was not deterred from becoming an author, for which he offers the following apology:

"He has no other excuse to offer than this; that he has written in obedience to impulses which he could not well resist. Having been engaged, for nearly thirty years, in public and private practice, and, during that time, devoted an almost exclusive attention to the study of diseases and their remedies, he has accumulated facts, and formed opinions, which have been long soliciting expression, with an urgency to which he has at length yielded, though unfeignedly distrustful of their sufficient value."

The treatise before us is designed to embrace every thing immediately connected with, or necessary to the comprehension of practical medicine; hence, the first volume opens with a somewhat extensive consideration of *general pathology* and *therapeutics;* and at another part of the work, *physical diagnosis* is discussed at some length.

An accurate knowledge of these several topics, will be conceded by all, to be indispensable, and that no practitioner is able to avail himself of all the advantages of his profession without perfect familiarity with these collateral departments. But, at the same time, we are not quite sure, that they can be made available in a treatise on the practice of medicine; still there can be no positive objection to their introduction, and still less to their perusal by the student, or the practitioner. The idea which we wish to convey, however, is that they are not discussed in sufficient detail to convey a knowledge to the uninformed, or those who have not previously studied the subjects; and to those who have devoted attention to them, the amount of information conveyed becomes comparatively unimportant. Our opinion, then, is briefly this: that if the student does not previously understand general pathology, and physical diagnosis, or if he should not avail himself of other sources of information, he cannot obtain a knowledge of these departments from a perusal of the chapters devoted to them in Dr. Wood's treatise; for however accurate his views and opinions may be, they are necessarily too limited to comprehend an elementary knowledge of the subject. Therefore, while we would advise all—students and practitioners—to *read* these parts of the work, we would still caution students against relying upon them for a full and com-

plete knowledge of the departments of which they treat, but on the contrary, we would commend to them the study of separate works devoted to these subjects.

The *second part* is devoted to *special pathology*; and here we have fully exemplified the difficulty in making unexceptionable classifications of disease; for with all the care and attention which the author has been able to bestow upon the subject, numerous errors may be pointed out—perhaps more attributable to the difficulties attending classification than any want of skill on the part of the author. All diseases are arranged under three classes: Class I, *General Diseases*, including the different forms of fever. Class II, *Constitutional Diseases*, including *rheumatism* and *gout*. Class III, *Local Diseases*, including all the local diseases of the system, and many which are *not* local, as we can very easily show.

Too much refinement in classication is a misfortune. Far better is it to follow a more natural arrangement, and thereby avoid the extremes of artificial systems.

Our author recognizes, according to his classification, but two forms of *constitutional* disease, namely, *rheumatism* and *gout:* all the remainder (independent of febrile diseases,) he places in the class of *local* diseases. In several of these instances our author has been totally misled. Thus in the class of *local* diseases, he includes *phthisis, plethora, anæmia, scurvy, purpura, lithiasis, &c.* And yet no one would pretend to say that either of these affections are *local*—certainly not more so than rheumatism and gout, which are regarded as the only two forms of *constitutional* disease. All enlightened pathologists regard Phthisis as a *general* or *constitutional* disease, and when the author employs the term *diathesis*, as referring to Phthisis or Scrofula, he must necessarily refer to a diseased condition of the system at large, or a *constitutional* disease, which *precedes*, and is the *cause* of the *local* affection. The fact, that local deposits occur in the lungs, furnishes us no evidence that the disease originated in the pulmonary organ; and if it did not originate there, there is clearly a delusion in calling it a local affection. And we are equally surprised that the author should have placed *plethora* and *anæmia*, among the local diseases; we had not supposed that diseases of the blood were to be regarded as local affections.

In the article on *fevers*, we find included small-pox, vaccine disease, chicken-pox, measles, scarlet fever, and erysipelas. If these affections deserve a place among the fevers, without any distinctive appellation, and simply because they are com-

plicated with *fever*, why not place in the same category pneumonia, gastritis, hepatitis, mumps, and all affections attended with arterial excitement? The truth is, the *eruptive* fevers should be classed separately, and not associated with the intermittent, remittent, and continued forms of fever.

These objections to the author's classification by no means imply that the subjects are treated in a similarly imperfect manner. It is true, we think the space appropriated to the different subjects is not always proportioned to their importance; thus only about 120 pages are devoted to the intermittent, remittent, and continued fevers; which is evidently too brief to do full justice to these important subjects; while other subjects comparatively unimportant occupy more space than they merit. And we inclined to the opinion, that more extended views of special pathology might have been advantageously indulged, at the expense of the discussion of obsolete doctrines and exploded theories.

The most important qualities in a systematic work on the practice of medicine, are to give accurate and explicit details of symptoms, thereby furnishing the elements of diagnosis; clear, concise, and correct pathological descriptions, and the most approved course of therapeutics, which is to be derived from the experience of the whole profession, and modified according to the opinions and observations of the author. In all these respects, we are of opinion, that Dr. Wood has succeeded in arranging a system which fully comes up to the reasonable expectations of the profession. It may be that he has advanced but little that is absolutely new; but that feature is rather a commendation, for had the author introduced many novel features of practice, or suggetsed many new remedies, or new application of old ones, it would very naturally have excited distrust as to their accuracy. It rarely falls to the lot of one man to present *many* new modes of practice that stand the test of future observations; and he who lays claim to the greatest amount of originality, is often either a speculative practitioner, or is claiming the views and discoveries of others as his own.

It is true, the preface led us to anticipate greater modifications of the received modes of practice than we find upon examination of the treatise before us; but it is probable that the preferances which the author gives to particular articles, and particular modes of practice, constitute the *facts* and *opinions*

which he states have been long accumulating, and which finally could be suppressed no longer.

In determining between the merits of this and other systematic treatises on the practice of medicine, the student or practitioner will be guided more by his taste and inclination, than any absolute superiority or difference, between several which we could name. Thus the differences between the works of Dunglison and Wood, are comparatively small; one may have excellencies which the other has not; and it may have faults which the other has not. So that the student who may study and comprehend one of them accurately, will be about as well informed, and as competent to practice as he who has studied the other.

Finally, Dr. Wood has succeeded in arranging a clear, accurate, and sufficiently comprehensive digest of the present state of practical medicine. His descriptions are usually lucid, and his details remarkably faithful, and his opinions cautiously advanced; and, indeed, he has exhibited an amouut of patient research and extensive, and intimate knowledge of the various topics embraced within the wide range of his subjects, which is highly creditable to him as an industrious and faithful medical scholar, and which has enabled him to accomplish his arduous task in a manner creditable to himself and beneficial to the profession. It may be regarded as an accurate and faithful treatise upon which the student may safely rely.

For sale by Mr. C. Marshall, Lexington.

ART. IX.—*Medical Botany; or a description of the more important Plants used in Medicine, with their History, Properties, and mode of Administration.* By R. EGLESFELD GRIFFITH, M. D., member of the American Philosophical Society, of the Academy of Natural Sciences of Philadelphia, etc. With upwards of 300 illustrations. *Philadelphia:* Lea & Blanchard. 1847. 8vo. pp. 704.

This is one of the few books which supplies a positive deficiency in our medical literature. Heretofore, no work devoted strictly to medical botany, of a character which could be readily obtained by the profession generally, was extant in our country; and when we remember the many important and valuable medicinal agents obtained from the

vegetable kingdom, its importance will be at once fully appreciated.

It is true, very many of the plants mentioned in this and other works on botany, are comparatively valueless—very many are nearly inert, or possess properties so nearly analogous to hundreds of others—a very large proportion of which are slightly tonic and stimulant—that they possess but little that can interest the practical physician; but on the other hand, many others possess highly important medicinal properties, and which become of intense interest to the practitioner; and even those which are of less consideration, possess some value, and should not be entirely disregarded.

The first part of Dr. Griffith's work is occupied with vegetable anatomy, physiology, chemistry, classification of plants, and pharmaceutical botany. This portion of the work, although necessarily brief, is, nevertheless, sufficiently comprehensive to give a good outline of vegetable anatomy and physiology—an exceedingly interesting subject—and also to furnish a classification of plants.

The main body of the work is made up of descriptions of medicinal plants, foreign and domestic, including their botanical relations, a general description, and their medical properties; the whole illustrated with beautiful and accurate engravings. This last feature of the work imparts to it a peculiar interest; the delineations are numerous and accurate, and add greatly to the value of the descriptions.

The botanical descriptions of the plants have been taken from the best authors; and the account of their medical properties have been derived from the most accurate sources, so that the reader can fully rely on the accuracy of these several details.

We regard Dr. Griffith's *Medical Botany* as a work of interest and value; it is one which should occupy a place in every medical library. The author deserves the thanks of the profession for his indnstry in compiling and arranging the work; and we are under obligations to the publishers for the handsome style in which they have performed their part.

For sale by Mr. C. Marshall, Lexington.

ART. X.—*The Medical Students' Vade Mecum*, or *Manual of Examinations upon Anatomy, Physiology, Chemistry, Materia Medica, Obstetrics, Practice of Medicine, (including Physical Diagnosis and Diseases of the Skin,) and Poisons.* Second edition, revised and greatly enlarged. By GEORGE MENDENHALL, M.D., Lecturer on Pathology in the Medical Institute of Cincinnati; Member of the Philadelphia Medical Society, &c., &c. *Philadelphia:* Lindsay & Blakiston. 1847. 12mo. pp. 574.

We have heretofore noticed in terms of commendation the first edition of this work. The second edition is greatly enlarged and improved, and is still further deserving the confidence of students. The subject of Physiology, which was omitted in the first edition, has been introduced into the second, and the work is now complete. The student may rely upon its accuracy and faithfulness of detail; and if carefully studied, it cannot fail to aid very materially, those engaged in elementary study; and especially will it be serviceable in preparing students for examination. For sale by C. Marshall, Lexington.

ART. XI.—*Outlines of the Veins and Lymphatics; with short descriptions.* Designed for the use of students. By JOHN NEILL, M.D., Demonstrator of Anatomy in the University of Pennsylvania, Lecturer on Anatomy in the Medical Institute of Philadelphia, &c. *Philadelphia:* Ed. Barrington & Geo. D. Haswell. 1847. pp. 29.

This work is similar in design, and is intended to accompany the *Outlines* of the Arteries and Nerves, by same author. To students, for whom it is designed, the work is of the highest value. The veins and lymphatics are carefully and accurately delineated, the names attach to each, and the veins colored blue, so as to be distinguished at a glance. Students will do themselves great injustice if they do not consult this useful work. For sale by C. Marshall Lexington.

ART. XII.—*Elementary Chemistry, Theoretical and Practical.* By GEO. FOWNES, Ph., D., etc. etc. Edited, with additions, by ROBERT BRIDGES, M. D., Professor of Chemistry in the Philadelphia College of Pharmacy, &c. &c. A new edition, with numerous illustrations. *Philadelphia:* Lea & Blanchard. 1847. 12mo. pp. 460.

The well deserved popularity of this admirable little manual has caused the issue of a new edition, scarcely two years after the appearance of the first. The editor has made such emendations and additions as are necessary so keep the work up with the improvements in chemical science.

We have already spoken of this manual as the best small one which has been published in this country. P.

ART. XIII.—*Some account of the Letheon;* or, *who is the discoverer?* By EDWARD WARREN. Third edition. Revised and enlarged. *Boston:* 1847. pp. 88.

Who discovered the Letheon?—or, in other words, who first ascertained that the vapor of *pure* ether inhaled into the lungs in mixture with atmospheric air, causes insensibility to pain in surgical operations? is a question not yet decided.

In Europe, especially in Paris, Dr. Ch. T. Jackson, the joint patentee with Dr. Morton, seemed peacefully to have gathered all the laurels, when a counter-claim was urged by Dr. Wells, of Connecticut, and the next arrival from France may bring the results of the protest of Dr. Morton; to whom exclusively belongs, if we are to believe the writer of the present pamphlet, the honor of this remarkable discovery.

We do not, however, propose to sit in judgment on the various claims set up for this honor. Doubtless the facts from all parties will be accurately weighed by the *committee on ether* of the French Academy of Science and the palm awarded by them where it is merited. It it evident, however, that the author of the present pamphlet, Mr. Warren, (who, by the way, is *not* Edward Warren, M. D.,) makes out a strong case for his client, Dr. Morton.

Very extensive experience has now been obtained of the action of this new agent; and its influence in the prevention of pain, when properly administered, is fully established. The failures which at first occurred in its application seem to have

been caused by the use of impure, unwashed ether, or of an imperfect inhaling apparatus.

It is asserted, in the present pamphlet, that "Dr. Morton himself, and by his immediate agents, has administered the ether to more than *ten thousand patients*, without a *solitary accident*." On the contrary, if we are to believe the journals, other experimenters have not been so fortunate; and among the great number of cases in which this agent has been used successfully, for the prevention of pain in surgical operations, some have been reported in which the patient never rallied again, but sunk, apparently under the too powerful influence of the ether, superadded to the shock of the operation. These unfortunate cases, however, have been remarkably few, in comparison with the immense number of experiments which have been made with it in all parts of the civilized world, by persons who had to feel their way in its application, with inhalers of all descriptions, ether of various degrees of purity, and on subjects of almost every idiosyncracy. They are, however, sufficiently numerous to inculcate great care in the use of the ether, and to forbid its employment in every instance where the production of insensibility to pain is not of *paramount* importance. In view of the fatal cases, unequivocally resulting from the etherization in Zurich, Switzerland, we are told that "the Council of Health has recently issued an order prohibiting its use by those who practice dentistry, bleeding, and other minor surgical operations." Whether the vapour of ether acts by altering the character of the circulating fluid; which it completely pervades, so that a member, amputated while the patient is under its influence, emits, strongly its characteristic odor;—whether it acts directly on the nervous matter to cause a temporary change in its composition or structure; or whether it produces partial asphyxiation by the exclusion of the atmospheric oxygen; still its effects must be closely watched in all instances. It has been clearly proved by the experiments of Flourens and others, upon animals, that while loss of motion and of sensibility may be the first result of the ether inhalation, it will, if kept up, for a length of time varying according to circumstances, finally cause the complete destruction of life.

It is evident, therefore, that while it may be a great boon to suffering humanity in proper hands, common prudence requires that its use should be restricted to those who are competent to watch its effects and to employ it with all the possible precautions to prevent injury or death.

We confess to be so far "tinctured with the old and exploded prejudices against patents" as to regret that the professed discoverers should have taken this method of securing to themselves the honor and profits of this new application. The result has fully exhibited its *impolicy;* for contrary to the general belief, we are told by Mr. Warren in the present pamphlet, that Mr. Morton has so far derived no profit, but has actually suffered a loss in bringing out this discovery.

It would appear that a patent could not be legally sustained in England, and perhaps in France; the use of the ether in surgical operations is therefore perfectly free in those countries; and Mr. Warren asserts for Dr. Morton, in the pamphlet before us, that "should our government come forward and refund the trifling sums he has received for the sale of rights, he would then most cheerfully give the unrestricted use of his discovery to the whole American people, and he would even do so without, and refund these sums himself, had he not become already involved in the matter. Or, if *any of our liberal and benevolent citizens would do the same,* Dr. Morton will not delay a single hour afterwards in making it free as the air we breathe. The amount is but small, and certainly *not more than Dr. M. has lost in making and bringing out this discovery.*" p. 83.

It appears pretty evident that no further attempts will be made to sustain the patent even if it be really and legally practicable.

It is a little remarkable that two of the latest discoveries of the day have, in this respect, met with nearly the same fate. Prof. Schoenbein was utterly foiled in his efforts to derive pecuniary profit from the *gun-cotton;* and the new application of ether has brought actual pecuniary loss to the patentees.

While we see no reason why the valuable scientific discoveries of any individual should not be to him, in some sense, personal property, to be bought by those who use them with a proportionate equivalent; yet, it has always been one of the liberal canons of science and of medicine, that they should freely be made public, and that the spontaneous gratitude of government of communities, and of individuals, should be the origin of the reward in fame and in money.

Another fact, of interest to those who may wish to employ ether inhalations, is that the various forms of inhaling apparatus, at first supposed to be essential to the experiment, are now superceded by the simple sponge soaked with ether and

held just above the nostrils of the patient. It is stated in Mr. Warren's pamphlet, "that no *sort of 'apparatus'* whatever has been *used in Dr. Morton's office for the last three months*, he having adopted the use of the *sponge* altogether." P.

ART. XIV.—*The half-yearly Abstract of the Medical Sciences, &c.* By W. H. RANKING, M. D., Cantab., &c. *Philadelphia:* Lindsay & Blakiston. January to July, 1847. pp. 364.

The present No. of this valuable periodical fully sustains the high character of its predecessors. The practitioner is here presented with almost every important fact connected with the current medical literature, and that, too, without the labor of wading through innumerable journals, and almost interminable details of cases. The low price at which it is published, ($1,50 per annum) should insure it a place in every medical library.

PART III.

AMERICAN SUMMARY.

1. *Endemic Gastro-follicular Enteritis.*—By EDWARD HALLOWELL, M.D., etc.—(*Am. Jour. Med. Sci.*, July, 1847.)—Cholera infantum has been regarded by many as peculiar to the United States; but while we admit its greater frequency and violence in this than in any other country, it is, nevertheless, met with elsewhere. M. Billard describes it in Paris; and it is known to occur in other countries. In the United States it is found more especially in the larger cities; although it prevails to a considerable extent in the smaller towns, and even in the country.

The author of this article adopts the opinion—and very correctly, as we think—that the disease is *follicular enteritis.* Some regard it as irritation or inflammation of the mucous membrane generally, while others attribute it to congestion or other derangements of the liver. Post-mortem examinations, however, have settled the question, and it is now known to consist essentially of irritation and inflammation of the isolated follicles of the stomach and intestines.

Preventive Means.—If the gums are swollen lance them, and send the child to the country. Free exposure to pure air, sponging with cold water, sleeping upon a mattrass or blanket, together with strict attention to the diet of the child and mother.

Treatment of the first stage.—This stage consists of increased *development*—irritation—of the mucous follicles, though not quite reaching inflammation. The author recommends the following course: "If not weaned confine the child to the mother's breast; if weaned, give milk and water, rice, barley, gum, or toast water; infusion of the benne leaf; incising gums, if swollen; but above all, removal to the country. Blisters behind the ears, as recommended by Eberle and Parish; (we cannot comprehend the utility of the blisters, except the head be affected.—Ed. Lancet;) warm baths night

and morning. To allay vomiting, lime-water, lemonade, Seltzer or soda water, chicken water, acetate of lead in solution, blue mass mixed with gum arabic, 1-12 of a grain of calomel, alone, or combined with 1-16 to 1-40th of a grain of opium, every two or three hours. The blue mass may be given thus: ℞.—Mass ex. hydrarg., grs. iv.; g. accaciæ pulv.; sacch. alb., aa. ʒss.; aq. ʒjss. M. Sig. A teaspoonful every three hours. Counter irritants, and emollient poultices may be employed. Should the disease continue, 1-12 to 1-6 of a grain of calomel, with 1-4 to 1-2 grain of ipecac may be given; or Dover's powders may be substituted for the ipecac. Should symptoms of acidity be present, prepared chalk or magnesia may be given. Astringents are dangerous." (We have often seen the *first stage* arrested by a few timely doses of calomel and prepared chalk, followed by mild astringents; indeed, we think the author is too fearful of astringents in this stage.—Ed. Lancet.)

Second Stage.—This stage consists of inflammation and softening of the mucous membrane, and ulceration of the follicles. Here the anti-phlogistic treatment becomes the great object; venesection, cups, leeches, injections of cold or iced water; occasional mild oleaguinous laxatives, injections of acetate of lead, small doses of calomel with ipecac. or Dover's powders, or it may be combined with 1-6 to 1-4 of a grain of acetate of lead. After depletion, blisters may be *cautiously* used, not allowing them to remain on longer than three hours. Should cerebral symptoms supervene, leeches, cold water, or vinegar and water, or lead water and spirits of wine should be applied; also stimulating pediluvia.

In the *chronic* forms of the disease, the following, recommended by Dr. Parish, may be given: ℞.—Potassæ sub-carb. ℈j.; gum acaciæ ʒi.; tr. opii., gtt. vi.; aq. cinnam., ʒiss.; sacch. alb., ʒi.; M. A teaspoonful every two or three hours. Should this not be sufficient, the following may be employed. ℞.—Test. ostrear. ppt., ʒiss.; gum accaciæ, ʒi.; tr. thebaic, gtt. x.; sacch. alb., ʒj.; aq. pur. vel aq. cinnam., ʒiv.; M. sig. A teaspoonful every two hours. Dr. Condie recommends charcoal. ℞.—Carb. ligni., ʒj. @ ʒij., pulv. rhei. ℈ij.; ipecac. grs. iv. to xij.; ext, hyoscyam. nig. grs. xij. M. ft. chart. xij. S. One to be taken every three or four hours. The charcoal should not be continued too long, otherwise it may *accumulate* in the intestines. Infusion of soda and hickory ashes, syrup of rhubarb, infusion of columbo, infusion of logwood, (Physic,) decoction of pomegranite root—or, accord-

ing to Dr. Chapman, infusion of blackberry or dewberry root—may be employed according to circumstances. Dr. Eberle recommends tartrate of iron in the advanced stage. ℞.—Ferri. tart., grs. xl.; syr. zingiberis, ʒss.; aq. pur. ʒij. M. From 20 to 40 drops to be given to an infant four or five times daily. Dr. Chapman advises the sulphate of iron. ℞.—Ferri sulphat., grs. ij.; acid sulph., gtt. x.; sacch. alb., ʒj.; aq. ʒj. M. Dose a teaspoonful. (The *citrate of iron* is probably equal to any other ferruginous preparation.—Ed. Lancet.) Dr. Meigs advises a tepid bath of the infusion of white oak bark. In addition to these remedies, turpentine, oil of juniper, balsam copabia, creosote &c., have been employed. The latter is employed by Dr. Hartshorne according to the following formula: ℞.—Creosote, gtt. j.; test. ostrear. prep. ʒij.; g. acaciæ pulv. ʒss.; aq. ʒvi. Dose, a teaspoonful every two hours, for a child two years old. Dr. Parish uses a gargle of lime water and bark, for an apthous condition of the mouth and fauces. Strict attention must be given to the diet.

Third Stage.—This stage involves the brain—drowsiness, stupor, coma, paralysis, convulsions. It consists in disorganization of the brain from softening of its tissue. This stage is, of course, usually hopeless; still we should resort to leeches and blisters; and the latter should be dressed with mercurial ointment.

---

2. *Account of a Physical sign of Pneumonia at the Apex of the Lungs.*—By Wm. M. Boling, M. D. (*Ibid.*) The sign consists in a fine mucous or crepitant rhonchus, seemingly seated in the larynx, loud enough to be heard distinctly two or three feet from the patient; and it is *persistent*. But the sound is only *apparently* in the larynx; it proceeds from the *apex* of *the lungs*, as may be perceived by placing the stethoscope immediately above or below the claviele.

---

3. *Effects of Blisters on the Young Subject.*—By John B. Beck, M. D., &c., (*N. Y. Jour. Med.*, July, 1847.) Dr. Beck states the following peculiarities of blisters applied to the young subject. 1st: They produce their effects in a shorter time than they do in the adult. 2d: The local imflammation produced by a blister is greater in the young subject than in the adult. 3d: Blisters are more apt to be followed by the injurious consequences of inflammation, such as ulceration, gangrene, and even death. 4th: The constitutional excitement produced by blisters is greater in the young subject than in the adult.

Hence, the author concludes, blisters are more potent in curing diseases of children, than of adults; but at the same time that they require more caution in their application. The following is a general summary of the author's views: Remove the blister as soon as the surface become uniformly red, and apply a poultice; dress the blister, according to the recommendation of Dr. Maclagan, with raw cotton—this dressing sticks to the skin, and finally comes away when new cuticle has formed; blisters should not be applied when the skin is unsound, as in measles, scarlatina, &c.; they should never be applied in high inflammatory excitement, nor when there is too much debility and emaciation; and, finally, attention should be paid to the temperament—some will bear blisters while others will not.

The author very properly condemns the practice, which is common among physicians and apothecaries, of sprinkling *powdered flies* on the surface of the plaster; the powder is apt to adhere to the skin, and produce evil effects.

---

4. *Properties of the Black Alder.*—(*Ibid.*)—Dr. Helmick, of Zanesville, O., recommends the common black alder, (*almes serrulata,*) in scrofula and secondary sypilis. It may be given in decoction or extract.

---

5. *Cerebro-Spinal Menningitis.*—(*N. O. Med. & Surgical Jour.*, July, 1847.) Drs. Hicks & Taylor detail the phenomena of several cases of disease which are doubtless to be classed under the above head—*membranous inflammation of the brain and spinal cord.* The following are the prominent symptoms as the disease occuared in Mississippi and Tennessee. It occurred principally in young persons; it is ushered in with chilliness, moderate reaction, pain between the shoulders, and extending to the occiput, rigidity of the cervical muscles, and retraction of the head, as in tetanus; delirium, contraction of the pupils, sometimes delitation of one eye; ecchymosis under the eyes and over the body; rigidity of the abdominal muscles, and twitchings of the flexors of the extremities; imperfect expansion of the chest; constipation; stertorous breathing; coma; *death.* Usually runs its course in from fifteen to seventy-two hours—sometimes longer. *Post morem* examination revealed signs of cerebo-spinal meningitis; also the liver greatly engorged.

The disease proved peculiarly intractable; three-fourths of the cases proving fatal. Every varie yof treatment was re-

sorted to, ranging from direct depletion to stimulants and anodynes. Dr. Hicks speaks favorably of vigorous blood-letting, active mercurial cathartics, and cupping and blisters to the spine.

---

6. *Œdematous swelling of the Glottis relieved by Incisions.*—(*New York Annalist*, July, 1847.)—"Dr. Buck further stated, that it had long ago occured to him, that in cases of œdema of the glottis, when suffocation seemed imminent, that the patient might be relieved by incising the edges of the glottis and epiglottis. An opportunity having recently occurred, he had had recourse to the practice with decided benefit. The patient suffering under inflammation of the fauces became affected with dyspnœa, attended with paroxysms of impending suffocation. On passing the finger into the fauces, the epiglottis could be felt enormously swollen and tense. The swelling of the glottis could likewise be distinguished. In the operation, a pair of curved, sharp pointed scissors was employed, and afterwards, a curved sharp pointed bistoury, guarded to within a quarter of an inch of the point. The patient expectorated two or three spoonsful of blood, mixed with the secretions of the fauces, and expressed himself decidly relieved. Besides the operation, the patient was bleed, leeched, inhaled equeoue vapor, &c. He recovered."

---

7. *Homœopathy.*—A severe case of scarlatina is *reported* to have been cured in the *London Dispensary*, in the following manner: *First* prescription—*one globule* of belladonna, 24th power, (dilution;) *second* prescription—another similar globule, twelve hours after the first; *third* prescription—next day *one globule* of the 30th power, (dilution.) Thus *three doses* (so minute that no man can calculate the quantity) of belladonna, cured a severe case of scarlatina, in about twenty-four hours!! The sapient report adds: "There was no period of convalescence, so rapid and perfect was the cure."

We notice, also, some marvelous reports from *Bremen;* among others the following cases of diseases. Croup 38; all cured; phthisis laryngealis, 14—12 cured; inflammation of the medulla oblongata, 2—both cured; rheumatism, 72—all cured; measles, 159—all cured; scarlet fever, 5—all cured; erysipelas, 21—all cured; scrofula, 30—28 cured, 2 improved; rachitis, 3—all cured; typhus fever, 45—42 cured; chorea, 2—both cured; epilepsy, 6—3 cured, 2 improved; delirium tre-

mens, 3—all cured; and last, though not least, pleurisy, 33—cured, 34! This may be *typo's* mistake; but it is not greater than the *doctor's* in the preceding instances.

8. *Treatment of Tetanus.*—(*Boston Med. & Surg. Jonrnal*, July, 1847.) Dr. BROOKS relates several cases illustrating the good effects of N. E. Rum in the treatment of tetanus. Several cases recovered under its administration; any other form of spirits would probably be equally efficacious.

9. *Cajeput oil as a Remedial Agent.*—(*Ibid.*). Dr. PRESTON recommends this oil as an efficacious external application in chronic rheumatism. He conceives that it acts particularly upon the nervous system; and hence he gives it in flatulent colic, (from four to six drops) and obstinate singultus. Diluted with three or four parts of ol. amyg. dulc., he found it useful in deafness caused by hardened or deficient cerumen.

10. *Delirium Tremens treated by Inhalation of Ether.*—(*Ibid.*)—Dr. UPHAM, of Boston, relates a case of delirium tremens successfully treated by inhalation of ether. The ordinary remedies had previously failed.

11. *Complete closure of Vagina, with subsequent conception and safe delivery.*—Dr. SIMMONS, of St. Louis, in the *St. Louis Med. & Surg. Journal*, reports the following case: Mrs. W., after her first confinement, was attacked with acute phelgmonous inflammation of the soft parts, which resulted in an entire close of the vagina, by a formation of a firm fibrous texture three-fourths of an inch thick, extending from the urethra to the fourchette, vertically, and from the base of one labium to the other transversely.

A careful examination of this new formation, with various sized probes, &c., could not detect any opening whatever.—Neither could any fistulous orifice be detected in the urethra, or about the anus. Yet in this condition she menstruated, and *conceived*, as the sequel proves, for she was delivered of a fine child, after the accoucheur divided the integuments sufficiently. Two physiological questions arise. How did the woman menstruate; and by what law of the animal economy did conception take place?

12. *Strychnine in Intermittent Fever.* By DANIEL BRAINARD, M. D., Prof. Surg. in Rush Med. Col., (*Ind. & Ill. Med. Surg.*

Jour.)—Eighty-three cases are reported, treated from 20th February, 1846, to 1st of April, 1847, with the following results:

Cases in which it had no influence, ...	14
In which it arrested the paroxism for one week,	3
For two weeks, ...	6
Which were arrested permanently, ...	60
	83

The strychnine was given in 1-8 grain doses thrice daily, till one grain was taken. In nearly all the cases quinine had been given, but with only temporary relief, and most of them were cases of long standing and frequent relapses.

---

13. *Iodide of Potassium in Hydrocephalus.*—Several cases have been reported of late in different medical periodicals, which apparently exemplify striking results from the employment of iodide of potassium in hydrocephalus. The Annalist observes in view of the evidence offered of its efficacy, that it would be criminal in future to omit its use in this intractable disease.—*Buf. Med. Jour.*

---

14. *Value of Medical Practice in London.*—Thirty surgeons of London have sworn that their annual income amounts to $50,000, each, and three to upwards of $100,000. Sir Astley Cooper's business in his best days about $115,000 per per annum.—*Ibid.*

---

15. *The Discoverer of the Letheon.*—The legislature of Connecticut has recognized the claim of Dr. Horace Wells, of Hartford, as the sole discoverer of the Letheon, and passed him a vote of thanks.—*Boston Med. & Surg. Jour.*

PART IV.

FOREIGN SUMMARY.

16. *Purple Tint in Inflammation.*—(*London Med. Gaz.*)—A *purple tint* denotes venous congestion, and the inflammation having extended to the subcutaneous cellular tissue. It frequently precedes the formation of matter and diffused abscess, indicating the necessity of support, and even stimulus.—*B. Cooper.*

17. *Mode of providing a wet nurse on a sudden emergency.*—(*Ibid.*)—The inhabitants of Bona Vista (Cape Verd Islands) have a ready and most extraordinary mode of providing wet nurses on any sudden emergency, or when occasion requires. Any woman who has once borne a child, and is still within the age of child-bearing, is available for this purpose. The details of the process are somewhat long, but the main part of it consists in the continued fomentation of the mamma with a decoction of the leaves of the *iatropha curcas*, and suction of the nipple. I saw the experiment tried most successfully, a copious flow of milk having been produced on the fifth day of application of the decoction in a woman who had not nursed, and in whose breasts there had been no milk for twenty months.—*Dr. M'Williams' Report.*

The *iatropha curcas* is a West India plant, the seed of which is commonly known under the name of physic-nut. All parts of the plant, but especially the seeds, contain an acrid, irritating oil, which produces vomiting and purging.

18. *Ether in Parturition.*—(*Ibid.*)—Prof. Dubois observes: "I must here subjoin a fact I have commonly observed throughout my researches on the action of ether in those special cases; it is, the extreme apparent laxity induced in the mucular layers of the perinæum. With primiparæ even, dilation of these parts has been so rapid, that in those cases where parturition took place during the state of insensibility,

the duration of which never exceeded fifteen minutes, the expulsion of the child has been painless; and we must note, as worthy of notice, that one of these women bore a child weighing eight pounds, and that in her case the perinæum was not damaged in the slightest degree. I must also make the important remark, that after delivery, the uterus in all the cases has constantly and immediately resumed the firm contracted state of its retracted parietes."

19. *Alkalies in Diabetes.*—(*Ibid.*, from *Heller's Archiv.*)—In a diabetic patient in whose blood a large quantity of sugar was detected, M. Polli observed the blood to possess a highly alkaline reaction—a circumstance which he considers to be quite opposed to M. Mialhe's view of the real nature of diabetes. Moreover, he observes that, in two cases of diabetes under his care, the prolonged use of alkaline remedies produced no diminution in the quantity of sugar contained in the urine, although the patients certainly expressed themselves relieved whilst under this plan of treatment.

20. *Chronic Inflammation of the Testicle.*—By C. Hawkins, Esq.—(*Ibid.*)—The author defines the disease to be chronic inflammation of the mucous membrane lining the tubuli seminiferi. The deposit which takes place in the tubes cause them to enlarge, sometimes burst, the tunica albuginea ulcerates, and finally the scrotum may be perforated. The following is the author's treatment:

"The horizontal posture with proper support for the testis, is to be strictly observed, so as to prevent the undue congestion produced by the weight of the column of blood in the spermatic veins. Mercury is to be given, so as to keep up a gentle action on the gums. You will find calomel and opium the most effectual form of administration. I have given the blue pill to a patient with but little effect; and, upon changing to the calomel and opium, I have quickly succeeded in effecting a cure. In many cases some tonic, of which sarsaparilla is on the whole the best, is also required, sometimes at the commencement, if the patient looks weak and out of health; in other cases after mercury has been given for two or three weeks. You may in some instances find the bichloride of mercury given with the sarsaparilla or bark a better form of administration than the others. The mercury is to be given so as gently to affect the gums, but without any salivation; and in a few cases, when scrofula or some other

circumstance prevents the mercury from being borne well, some iodide of potassium will do good, but you cannot generally rely upon it."

---

21. *Electric Moxa.*—(*Ibid.*)—Dr. Golding Bird proposes the following method of establishing a permanent discharge by means of a simple galvanic arc. Apply two small blisters, say one inch in diameter, where the issue is desired, a few inches apart; when the cuticle is raised, discharge the serum, and apply a plate of zinc foil to the one from whence the discharge is required, and a piece of silver to the other; connect them by copper wire, and cover with water dressing and oiled silk. An eschar will form under the zinc, while the blister under the silver will heal. The eschar will separate in four or five days, when the plates may be removed.

---

22. *Treatment of pain in the Stomach.*—(*Monthly Jou. Med. Sci.*, June, 1847.—1. Pain *from acidity.* ℞. Rhubarb, grs. vi; bicarb. soda, grs., xv; columbo powd., grs., iij; cinnamon pow. comp. grs., ij. To be taken in a glass of water, before dinner or at bed time, *and continued at least a fortnight.* 2. Pain from *irregular contraction*, (without heart-burn or vomiting.) ℞. Trinitrate of bissmuth, calcined magnesia, comp. tragacanth powd., of each, 3i; mix and add water, 3jss; syrup 3ss. To be taken every four hours.

---

23. *Disease of the bones from Rheumatism.*—(*Ibid.*)—Prof. Hasse observed that the articular extremities of bones in rheumatism, were somewhat reddened, in spots, and extending several lines into the spongy osseous substance. The foramina of the bony substance were filled, to the depth of the redness, with dirty-red soft and friable pulp, which, under the microscope, proved to be aggregated cells, containing one or more nuclei and nucleoli. There was also evidence of increased rascularity. These cells are regarded as evidence of the presence of inflammation.—*Zeitschright fur Rutionelle Medicin.*

---

24. *Scleroma of the Cellular Tissue of new born children.*—This disease, so imperfectly understood, has lately been closely investigated by the Vienna School. The following are the principle facts as set forth by Dr. Eman Mildner, of Prague:

Pathological Anatomy.—Its seat is in the subcutaneous

cellular tissue, corium, and very rarely in the cellular tissue of the superficial muscular layers. Fluid is infiltrated, and presents various appearances—serous, thick, jelly-like, and yellow, or brownish-yellow color; it may become purulent or ichorous, and may be mixed with cruor. The blood is generally diseased, partaking of the albuminous dyscrasia of Engel, or even of dissolution. Catarrhal or croupy affections of the mucous membranes, and clammy, horny-like exudation in the serous cavities; inflammation of the umbilical vessels, peritonitis, hemorrhage between the membranes of the brain, with general cerebral congestion, apoplexy and meningitis, &c., occasionally occur.

Symptoms.—There are *two degrees* of symptoms. 1. Swelling, dryness, hardness and coldness of the integuments covering the extremities, or genitals; no fever. When congestion comes on, the skin assumes a red tint, and its coldness, dryness, and hardness disappear. 2. Umbilical cord undergoes rapid putrefaction; swelling of the integuments extends over the thorax, neck and back; hardness, dryness, and coldness increase; the color of the skin varies with the infiltration; vesicles may appear. These symptoms all increase—the child emaciates, becomes more rigid and insensible, and finally diarrhœa or bloody discharges hasten the dissolution.

Pathology.—Scleroma is not attended by any constant or uniform internal lesions.

Etiology.—The influence of cold—atmospheric vecissitudes—favor the occurrence of cutaneous inflammation, and hence cold is regarded as a principal cause of the disease.

Treatment.—The disease may be prevented by avoiding exposure to cold. Hence in foot presentations the parts should be carefully covered. In the treatment, warm, dry, and aromatic fomentations; friction with flannel sprinkled over with camphor; tepid baths and diaphoretics. In the second degree, treatment is seldom beneficial.—*Monthly Jour. Med. Sci.*, from Prager Vierteljahrschrift.

---

25. *Diuretics in Scarlatina.*—(*Ibid.*)—Dr. Kubik makes the following observation: The *eruption* in scarlatina depends upon the stoppage of capillary circulation, *inflammation* of the skin occurs, which continues for several days without undergoing any change of color. In the *treatment*, the use of digitalis, nitre, acetate and tartrate of potash, are indicated by *copious*, *pale*, and *albuminous* urine, with steady acceleration of the pulse. On the contrary, *bloody and scanty* urine,

with a sensation of burning and aching in the lumbar region, render the employment of oily and emollient remedies necessary.

---

26. *Epilepsy.*—(*Ibid.*)—Dr. Blackmore, of Bath, noticed that epilepsy has been brought on by a sudden depletion of the vascular system. The following case confirms the accuracy of the observation. A clergyman of active habits and slender frame, had been liable to occasional attacks of epistaxis from his boyhood until the age of thirty, when a bleeding more copious and obstinate than usual, came on in the evening. His brother, a medical practitioner, bled him, *ad deliquium*, when the epistaxis ceased, but violent convulsions of an epileptic character came on. On the following day he was attacked with decided epilepsy, and has continued ever since a frequent sufferer from the disease.

---

27. *Pityriasis.*—(*Ibid.*)—For this disease Dr. Graves recommends the application of tincture of iodine. When any solution, whether of sulphate of copper, nitrate of silver, or the tincture of iodine is to be applied to the scalp or to the skin, it ought to be done, not with a camel's hair pencil, but with a brush of hog's bristles, such as house-painters use, the brush portion being about the thickness of the middle finger. This renders the application at once more speedy and efficacious.

---

28. *Blood in Puerperal Fever.*—By M. Hersent.—(*Ibid.*) From *Gaz. Méd. de Paris.*—1st, the appreciable modifications of the blood in puerperal fever consist in a considerable increase in the quantity of water in a very remarkable diminution in the quantity of the globules, and a great decrease in the amount of the albumen.—2d. The severity of the disease is in the direct ratio of the intensity of these modifications. 3d. The blood generally preserves its normal proportion of fibrine, and therefore it is not diffluent, as is generally supposed. 4th. In a few cases this diffluence is met with in consequence of the very great decrease in the quantity of fibrin, but it cannot be considered as a constant alteration. 5th. This vitiation of the blood probably exists before the development of the disease, but it cannot be regarded as the cause of the affection: still its existence much increases the danger of the malady.

---

29. *Galvanism in Parturition.*—Dr. Simpson has pub-

lished a somewhat elaborate paper, in the July No. of the Monthly Jour. Med. Sci., detailing various experiments in regard to the oxytoxic power of galvanism. The following are his conclusions:

It would be hasty and logically incorrect to deduce from the preceding observation, that under no modification, and under no manner of application does galvanism possess the power of directly exciting or increasing the contractile action of the uterus. Forms or methods of employing it may yet possibly be detected or devised, affording a different result. But I believe I am justified in inferring from the preceding inquiry that as employed at the present time, and in its present mode, it is not a means which can be in any degree relied upon for the purpose in question; and is so far practically and entirely useless as a stimulant to the parturient action of the uterus.

---

30. *Mercury in Pericarditis.*—Dr. Taylor, of the University College Hospital, London, has published the history of forty cases of pericarditis, states that the good effects of ptyalism were very obvious. In most instances where he succeeded in bringing his patients under the influence of mercury, they recovered; when he failed, they as frequently died.

---

31. *Laryngismus Stridulus, cured by Inhalation of Ether.*—(*Prov. Med. & Surg. Jour.*)—The subject was a fine healthy boy, one year old, who had suffered for several days with attacks of crowing inspiration. He was *teething*, and of full habit. The usual remedies—incising the gums, purgatives, leeches, blisters, etc., failed, and the disease became frightfully aggravated. The ether was then resorted to with perfect success, as follows:

Ether, poured on sponge, was instantly applied to the nose and mouth. The spasms increased for a few seconds, and then perfectly subsided, and the child was well again. For four days the spasms recurred, but were instantly overcome by the ether-vapour, and from that period the child has remained free from an attack, and is perfectly well.

---

32. *A Horse killed with Ether.*—(*Ibid.*)—Mr. Michlethwait read from the "Veterinarian" for April, 1847, an account of an experiment with ether-vapour on a horse, conducted by Messrs. Henderson and Cherry, which terminated fatally in six minutes. The diaphragm and aorta at

its commencement were both ruptured, but the case was of general interest, as bearing upon the subject of ether inhalation.

33. *New operation for Internal Piles.*—(*Med. Times.*)—This consists in the cauterization of the pedicles of the tumous with the solidefied caustic of Vienna. The following is the method of M. Amussat:

The intestine having been cleared by a dose of castor oil, exhibited one day before the operation, the hæmorrhoidal tumour is seized with a forceps, and, in order to protect perfectly the surrounding parts, they are isolated by the application of wooden or ivory blades, analagous to those of paper knives. Another forceps containing the caustic on the inside of its branches, is then past round the neck of the swelling, and cold water is injected over the tumour with a syphon throughout the operation, viz: two minutes. The hœmorrhoid is then emptied of its blood by a puncture with a tenaculum, a cold injection is made, and the parts are reduced. Three cases of success are reported; no accidents followed the use of the caustic.

34. *Hydraulic Dilatation in Stricture of the Urethra.*—(*Med. Gaz.*)—Mr. Goodman, of Manchester, employed the following method:

After introducing a gum catheter as far as the stricture, where it was well secured by a band of tape, and compress placed upon the penis to prevent escape, a syringe-full of warm water was injected with some force, and was found to pass with tolerable ease. On removing the apparatus the man micturated immediately in a stream about the size of a crow-quill. A second application caused a still further increase in the stream of urine, and the patient left for the time perfectly relieved.

35. *Treatment of Constitutional Sphilis in the Infant.*—M. Trousseau has for several years followed the subjoined plan of treatment in these cases with success:

He administers daily to both mother and child a sublimate bath: (hydrarg. bichloridi, dr. iij.—dr. vi.; alcohol, oz. iij., to a common bath.) If the irfant is nursed by the mother, the latter is made to take the proto-iodide of iron; if the child is weaned it takes ten drops of the following solution three times a day: ℞. Hydrarg. bichlor., gr., iv.; aquæ, oij. The dose amounts to about a 60th part of a grain.—*Gaz. Méd.*, Fèr., 6, 1847.

36. *Cure of Nævas.*—(*Dieffenbach.*)—In flat nævi up to the size of a crown-piece, lint steeped in pure liquor plumbi is fastened over the part with a bandage, and wetted by fresh applications of the lead, without frequent removal. After days or weeks, the swelling becomes whiter, flatter, and firmer; soon afterwards, little, firm, white spots form on the surface, and the cure is certain. By means of a solution of alum and compression, nævi so large that extirpation would have been impossible have also been cured. It may be necessary to keep the remedy constantly applied for six months.

37. *Potato Disease.*—(*Dublin Med. Press.*)—According to the microscophical observations of Dr. Power, the potato disease consists of a fungous growth of the starch globules. The opinion expressed by Mr. Smee, that the disease depends upon the presence of an insect, was not confirmed by the observations of Dr. Power.

38. *Precaution against Contagion.*—(*Ibid.*)—Dr. Kingsly, of the Roscrea Fever Hospital, observes:

When we consider the number of physicians who have been lately prematurely cut off by the prevailing malignant fever, and that insurance offices decline insuring the lives of the survivors, I consider it incumbent on every medical practitioner to offer the best advice he can towards the prevention of infection. I therefore do not hesitate to contribute my mite of information, derived from bed-side experience.

We use for this purpose a solution of the chloride of lime, in the proportion of one pound to four gallons of water, which is sprinkled over the floors of the wards by means of a garden watering pot, particularly between and under the bedsteads, several times a day, which has the excellent effect of purifying the foul air of the wards, rendering it quite sweet and agreeable for respiration. The inhalation of the chlorine that is evolved and respired by the patients (who are depressed by low and petechial fever) acts beneficially on them as a stimulant, very perceptibly improving their condition. We at the same time give freely the liquor sodæ chlorinatæ, ʒss. to ʒviii. of sweetened water, of which two tablespoonsful are given every two or three hours to every patient suffering under malignant fever and dysentery.

39. *Acute Rheumatism.*—By Dr. Wright.—(*Med. Times*)—The inflammatory action of rheumatism, affecting or super-

ficial parts, never terminates in the effusion of lymph, in adhesion, gangrene or abscess; but the products are increase of the natural secretions of the joint, thickening of the ligamentous or cartilaginous structures, or the deposition of earthy or saline materials. In some rare cases, the inflammation may become more phlegmonous, and give rise to abscess.

Rhuematic inflammation of internal organs runs nearly the same course, and furnishes the same morbid products as inflammation in general, viz: serum, lymph, and pus.

Dr. Wright dwells particularly on the *acid state of the secretions* as an invariable attendant upon rheumatism. This is shown in the *saliva, urine, perspirable fluid*, and the *blood*. And he has remarked, that the secretion from the skin will become more decidedly acid in the vicinity of rheumatic inflammation. Hence, Dr. Wright recognizes *two* pathological conditions, namely, the *inflammatory action*, and the acidification. To meet the first *depletion* is appropriate, for the second the employment of *alkalies* becomes indispensable. The author generally relies upon the latter, though not altogether discarding other remedies. The alkali employed is the bicarbonate of soda, given thus:

℞. Sodæ bicarb. ʒij;
Mist. camphoræ, ʒviij. M.

Dose, two large tablespoonsful every three hours. He also directs, in some cases, a warm bath containing two ounces of the soda. This treatmeut he has relied upon, in every case, for six years, without bleeding in any case, and without the loss of a single patient.

---

40. *Treatment of Cancer.*—Dr. Walshe has found conium and other narcotics, in the treatment of this disease, do little more than alleviate pain. The only medicine which he has found of real benefit is the *iodide of arsenic:* this, in conjunction with compression, has afforded the greatest chance of success. It may be given with safety in doses of one-twelfth of a grain, and continued for several months, if the precaution be taken to exhibit it about two hours after eating.

---

41. *Scarlatina treated with Distilled Vinegar.*—Mr. Isaac Brown has recently recommended the use of distilled vinegar in drachm doses in the treatment of this disease. Independently of the beneficial effects attributed to it during the progress of the disease, this medicine is supposed to prevent the subse-

quent anasacra, as he states, that since he has adopted the specified plan he never met with an instance of this *sequela.* Similar testimony is also afforded by Mr. Hunter, of Margate.

---

42. *Fungi in the Mouth and Intestinal canal.*—In his observations on the microscopic characters of the aphthæ of children, and of adults during typhus, REMAK found that a single aphtha often contained several species of fungi, and that the species of fungi, occurring in different aphthæ on the same individual, exhibited no constant relationship; also, that while one aphtha contained numerous fungi, others on the same individual contained none at all. Hence it appears that the loosening and ulceration of the mucous membrane is the primary phenomenon, and that the fungi are only produced under favorable chemical condition. It has been long known that the presence of aphthæ is usually associated with an excess of acidity in the primæ viæ; and it is very probable that a putrid condition of the surface of the mucous membrane would accelerate the conversion of sugar and starch into lactic acid, and thus afford a favorable soil for the growth of these fungi.

---

43. *Spermatorrhœa.*—Gonorrhœa undoubtedly disposes to this disease, as shown by LALLEMAND. But whether it be the gonorrhœa itself, or the balsam of copabia taken to cure it that causes this predisposition, it is difficult to say. The latter is probable, since it has been noticed by Schonbein to induce baneful effects on many persons who have taken it for gonorrhœa in full doses, and for a long time, giving rise to Bright's disease.

---

44. *The state in which Mercury exists in the Hyd. C. Creta, and Pil. Hydrarg.*—(*British Am. Jour. Med. Sci.*)—According to the experiments of Mr. NICHOL, of Toronto, the mercury combined with the chalk is in the state of an oxide, while the blue pill exhibited no signs of an oxide in the metal.

---

45. *Treatment of Chronic Bronchitis.*—Dr. THOMPSON commends the gentle influence of mercury, thus: ℞.—Blue pill, grs. x.; tartar emetic, gr. j.; ext. conium, grs. xx. Divide into eight pills. Repeated thrice daily; then gradually diminished.

PART V.

NOTICES OF EMPIRICISM.

1. *Quackery in Tennessee.*—(Communicated by Dr. MUIRHEAD, of Lebanon, Tenn.)—Although quackery is decidedly on the decline in this country, and its braggart impudence and absurd impositions, are every now and then visited with their "just recompense of reward," we still have occasional glimpses of it, skulking in the back-ground, and under some one or other of its Protean forms; "*Steam* or *hydropathy*, *wet-fire*, or gas." We see it entailing on its votaries, the sweets of its philosophy. However, the tone of public sentiment now augurs favorably for a total redemption from *quack doctors* and *dog-fennel*, which but recently threatened our entire subjugation; and in connection with this subject, the following communication "founded on facts," may perhaps afford a passing interest to some of your readers.

A very worthy citizen in our neighborhood, (but one "whose mind proud science never taught to stray") in an extremity of great abdominal distress, sent for a kind of a *radico-mineral*, *vegeto-wet-fire* doctor, to relieve his misery. In due time he arrived—was ushered into the sick-room, and, after having premised a few *professional* interrogatories, made a most signally inefficient charge on the fastnesses of the disease, (intussusceptio,) with all the flower and strength of his materia medica, with the exception of one division of his availables, viz: the *devil's balm*, alias *wet-fire*. He administered large and repeated doses of white walnut pills, prepared from bark, which had been stripped from the tree *downward*, but failed to procure any purgation; then he gave the same substance in the same form, prepared from bark, which had been stripped from the tree *upwards*, and was no less astonished at his want of success in effecting emesis; for you must know, that with this brotherhood, the *direction* in which excoriation is performed, determines the *direction of its operation*. *Calomy*, as he called it, was tried in vain—wet-fire, he affirmed, "would work its way anywhere," and on this assertion, there can be no con-

troversy, for from a very slight acquaintance with this satanical preparation, all will at once agree, that if once *in*, like murder, it will be *out;* and if like the "stolen candles," it may never "come to *light*," it will at least give indubitable indications of a very highly elevated temperature. Fortuneately for the sufferer, its exhibition was postponed until another agent, had been tried, new in the catalogue of remedies, but one that was clearly indicated—according to the doctor's etiolgy—for having accidentally learned from the domestics that his patient had consumed a whole *beef's tongue* that day for dinner, "quick as the lightning's flash," the fruitful source of all the pains which had hitherto baffled his therapeutical resources, gleamed upon his mind, and Archmides himself did not experience a more overwhelming thrill of ecstacy at his discovery.

The doctor re-entered the sick room, looked wonderously wise, and in presence of numerous by-standers, told the patient that he must have eat something exceedingly *pinted* and *vulnering* in its character, and *difewult in disgestion.* No, was the brief response; nothing but some dried beef's tongue. I thought so, said the sage, with an air of triumph, you all see that I am right, (addressing the company) for you know that it is the *natur* of beef's tongue to be *pinted*, and when dried, becomes more *vulnering* than in its *natral* state, and to add to its COMBUSTIVENESS, it was not properly *masturated* —went *souse* into the gut *pint* foremost, and blocked up the opening! It is needless to say that this burst of professional acumen was almost too much for the sensibilities of his audience; to them "were ne'er prophetic sounds so full of *marvel*" and by acclamation they dubbed the doctor, the greatest *physicianer* in all the *diggens.* We know that the teeth will sometimes sloven over the duties of their office, in fact the occurrence is so frequent that it elicits no animadversion; but when the sentinel at the pyloric orifice allows *unmasturated* beef's tongue to pass unchallenged and unchanged, he must be asleep on his post, and we are decided for a court martial and speedy action in the premises; such an enemy is rather too formidable to be admitted within the camp; and may, as in the present instance, endanger the very citidal itself; but the doctor "brought no railing accusation," not that he was restrained by any christian injunctions, but simply, because he recognized no such functionary, as the old Janitor, in his anatomical organization.

The doctor's course of treatment was no less original than

the manner in which he accounted for all the pathological phenomena in the case; all present were satisfied, and each in his own way expressed his unqualified credence, that the beef's tongue, and nothing but the beef's tongue, was the sole cause of all the misery which their neighbor was enduring; but the question arose, how was that tormenting *pint* to be removed? None could divine, for to the uninitiated all is mystery—a pause ensued, "omnes conticuere et ora tenebant," when this son of the healing art, this man of more subterfuge than reason with a smattering of immagination, and that untrammeled by a particle of judgment, made in substance the following very professional announcement, viz: that a plow line must be brought: adjusted to the lower extremeties, and the patient swung by the heels to the joists, so that the empacted tongue might have the advantage of gravitation; this done, and the appliance continued for a sufficient length of time, and the victim occasionally "well shaken," all would soon be well; "causa sublata tollitur affectus." The mandate would have been obeyed, but for the heart-rending importunities of the sufferer, to whom the idea of dangling in the circumambiant air, like a gosling on a spit, brought no pleasurable associations; and I have no doubt that even the classic allusion to Mohamet's coffin, as an "illustrious precedent" would have proved perfectly unavailing, in nerving this duglutinizer of beef's tongue to undergo the ordeal proposed. A regular physician was afterwards called in, and treated the case on scientific principle; this dupe to quackery was soon restored to his former health.

PART VI.

EDITORIAL DEPARTMENT.

Resignation.—It will be seen by an advertisement on the cover of the present number of the "Lancet," that the name of Prof. Lawson appears in connection with the Medical College of Ohio. The appointment has been accepted by Prof. L., and consequently he has resigned the chair which he previously held in the Medical Department of Transylvania University.

The vacancy thus created in the Transylvania Medical School will, we are assured, be filled prior to the commencement of the ensuing course of lectures.

The Western Lancet.—In consequence of the removal of the Editor to Cincinnati, the *Western Lancet* will hereafter be published in that city. All communications, therefore, designed for the Lancet, or for Prof. Lawson, should be addressed to *Cincinnati, Ohio.* This removal will not, in any way, interfere with the publication of the Lancet; it will be published as usual at the stated periods.

Our exchanges will please change their directions in accordance with the above arrangements.

October Lectures.—Transylvania Medical School, and the Medical College of Ohio, will deliver preliminary lectures, gratuitously, during the month of October. Students would do well to avail themselves of these advantages.

University of New York.—Prof. S. H. Dickson, of the Medical College of Charleston, S. C., has received the appointment of Professor of Theory and Practice in the University of N. York, vice Prof. Revere, deceased.

Royal College of Surgeons, London.—Mr. Benjamin Travers has been elected President of the Royal College of Surgeons, vice Mr. Lawrence, retired; and Mr. Edward Stanley and Mr. Jos. H. Green were elected vice presidents.

College of Physicians and Surgeons, N. Y.—Alonzo Clark, M. D., has been appointed Lecturer on Physiology and Pathology in this school.

Appointment at La Pitié, Paris.—Dr. Laugier, Surgeon of Beajuon, has been appointed Surgeon of the Hospital La Pitié, vice M. Lisfranc, deceased.

Abolition of the Concours in France.—By a vote of the Chamber of Peers, the system of election by *concours*, has been abolished. The most eminent and experienced of the profession of France, are decidedly opposed to the system.

The National Medical Convention and Medical Reform. By Samuel Annan, M. D.

The remarks on these subjects which I submitted to the consideration of the profession in the July No. of the Western Lancet, have drawn forth two replies; one from New York, in the Annalist; the other from Philadelphia, in the Medical News. It is not my intention to engage in an acrimoneous discussion upon the probable results of the proceedings of the two conventions which have already been assembled. The views which I entertain; in common with many respectable members of the profession, are so completely at variance with those of the friends of this movement, that it is obvious there is no possibility of any concert of action being brought about. I am quite willing to leave it to time to show what will be the effects of these annual meetings. If the physicians of the different States, can prevail upon the several legislatures, to enact laws prohibiting quackery, and encouraging science, the first and most important step would be taken towards accomplishing the improvements projected by the advocates of reform. But as long as it is permitted to any person, however deficient in education, both academical and professional, to offer himself as a physician, and charge, and enforce payment for his services, it is perfectly idle for the leaders of this proposed reform to attempt to compel students of medicine to pass through a prescribed course of study, beyond what the condition of the country will permit. Those who deserve and expect to obtain a high position, will prepare themselves in the best manner; while others with less ambitious aspirations, will be satisfied with a more common education. Some go to London, Edinburgh, and Paris, and endeavor to qualify themselves for a professorship; while others are satisfied with the briefest course of instruction, which the cheapest schools of New England, New York, and Ohio, offer to their acceptance, that they may be fitted for practice in a rough country amongst a

sparse and poor population. These are indisputable facts; and the chimerical schemes of these reformers reminds one of nothing so much as of that famous robber of Attica, Procrustes; who made all who fell into his hands to fit his bed, by cutting off a portion from those who were too long, and stretching those who were too short. Too much learning, as in the case of Dr. John Mason Good, Dr. Akenside, and many others, by forming a fine taste for the pursuit of elegant literature, disqualifies for the rough life of a practitioner of medicine; and on the other hand, too little is still more prejudicial, "by unfitting the physician for writing his prescriptions in Latin."

I was sorry to perceive that the writers of the replies in both the New York and Philadelphia journals, were greatly excited and provoked that any opposition should be made to their efforts at reform. Allowance must be made for them, when it is remembered that their expectations were at the highest point of elevation; and when it is noticed that the effect of their exertions has not, by a long distance, come up to their anticipations. But two of the medical colleges have attended to their recommendations; and even these two have not complied to the full extent with the injunctions of the Convention. Instead of lengthening the course of lectures to six months, the College of Physicians and Surgeons in New York, has advertised a five months' course, and the University of Pennsylvania has extended her course to five and an half months. Parturiunt montes, nascitur ridiculus mus.

But before it is admitted that these schools have obeyed the commands of the Convention, it must be ascertained that they oblige students to attend the entire term of lectures. Will either of these colleges refuse to matriculate a student who presents himself at the beginning of November, or of December, or of January? If the student is permitted to commence attending lectures whenever it is convenient, and notwithstanding is credited for a full course, it is virtually refusing to sanction the recommendation of the Convention. The reformers in Philadelphia and New York, will, no doubt, see to this important point being properly regulated.

The gentlemen who have honored my "Remarks" with a notice appear to take it in high dudgeon, that I should suggest a doubt as to the right of the Convention to assume the title of "National." On this question, I would now ask, by what authority did the Medical Society of the State of New York call a convention? The ordinary mode of convening such assemblies is to take a vote, of all those interested, as to the necessity for such a meeting. It may, therefore, be said to savour strongly of presumption for any society, or the societies of any State, to issue proposals for a convention of representatives from the whole country. Let us however look at the composition of the Convention, with reference to the question of its nationality. In the first place, the

Convention must be divided into two classes, viz: the reformers, and those to be affected by the contemplated reformation. The first class embraced all the delegates from medical societies, and meetings of physicians; the second, the professors of the medical schools. The great object of the first class was to place some restrictions upon the action of the second class, by which a smaller number of what they suppose to be better educated men, shall alone be admitted into the profession as Doctor of Medicine. As the venerable gentlemen from New York, the scope and design of whose remarks, it appears, I misunderstood, stated, when speaking upon the postponement of the consideration of the reports on the separation of the teaching and licensing privileges, "that was the very thing for which they came together." Now keeping this division in view, when the list of the members is examined, it is discovered that from the five New England States 33 delegates were appointed, 24 of whom were present; from the State of New York, 71 were appointed, of whom 51 were present; New Jersey appointed 14, present 10; Pennsylvania, 67, present 55; Delaware 13, present 9; Maryland 10, present 9; District of Columbia 3, present 2; Virginia 31, present 14; South Carolina 3, all present; Georgia 2, both present; Mississippi 3, 1 present; Ohio 4, present 2; Michigan and Tennessee 1 each, both of whom were present. From North Carolina, Florida, Alabama, Louisiana, Illinois, Indiana, Kentucky, Texas, Arkansas, Wisconsin, and Iowa, there were no delegates; and while New York and Pennsylvania, had 106 representatives, Virginia, Ohio, South Carolina, Georgia, Mississippi, Michigan, and Tennessee, had only 24 delegates to represent them. New York and Pennsylvania, with the assistance of New England and New Jersey, counted 140 delegates; and as the whole number was 233, this north-eastern portion of the commonwealth could control, and actually did govern, the movements of the Convention. New York performed her part as the Empire State, to the admiration of all beholders; and Pennsylvania, New England and N. Jersey, followed in her train, and sustained her in all her premeditated schemes.

In the next place, let us examine the state of the representation from the medical colleges. Twenty-eight out of thirty-seven sent delegates. Nine were not represented. These 28 appointed 60 delegates, of whom 50 were present. It is thus shown that the reformers from either N. York or Pennsylvania, could singly outvote the whole number of the representatives from the medical colleges; and that the professors constituted but little more than one-fifth of the whole number of the members of the Convention. That they were in a small minority, and felt their weakness, and the utter inutility and hopelessness of opposition to the proceedings of the reforming gentlemen, however much they might disapprove, was very perceptible from their

meekness and humility. Never have I seen more exemplary equanimity and patient submissiveness, nor a more striking exhibition of the christian doctrine, "when you are smitten on the one cheek, turn the other," than were displayed during the meeting of the National Medical Convention. Outnumbered as the professors were, it unquestionably was the most dignified course that could have been adopted; and it certainly was carried out with commendable forbearance and perseverance.

With reference to the composition of the Convention, it might also, with strict propriety be asked, how many members of each of the medical societies represented, were present at the meetings at which delegates were appointed? The difficulty of getting a full attendance of physicians, most of whom have their time wholly taken up by the discharge of their responsible duties, is well known. This is more especially the case with physicians in the country; and it was stated publicly in the Convention, that even the Philadelphia Medical Society, had but little more than a nominal existence, and could with great difficulty bring together a sufficient number of members to form a quorum for the transaction of business.

The conclusion at which I arrive is, that although the Convention was of the highest respectability, both for numbers and intelligence, it was not a fair representation of the profession of the entire country, and therefore is not entitled to the name of "National."

The Philadelphia gentleman denies that the position of the reformers is that of retrogression of the profession. He even admits that it is improving. Strange solecism, that under an improving state of things, there should be such an excitement got up. But that I was not mistaken in my supposition, I will quote the following sentences from a letter of Dr. L. Ticknor, President of the Connecticut State Medical Society, published in the New York Journal of Medicine, and endorsed by the editor of that periodical. "Considering our extent of territory and the multitude of States into which the Union is divided, it is by no means strange that the medical schools in the several States should gradually yield to other motives, than a desire to promote the best interests of society, by a thoroughly educated and properly disciplined medical faculty. It is fairly enough implied, if not perfectly obvious, that there exists no small degree of rivalship among our medical institutions and leading medical men; not, I fear, who shall furnish the most valuable and best-wrought article, but who shall furnish the greatest quantity." It would be easy to prove by quotations from the remarks of other advocates of reform, that the above paragraph contains the substance of the views which caused the attempts at the formation of a national convention. Rivalry amongst our medical institutions, and leading medical men! No exceptions made! All are included

in the same category. But our Philadelphia brother will only admit that the Convention asserted "that there were some schools in which the course of instruction was much inferior to what it was formerly in respectable institutions." I would ask the gentleman where are the respectable institutions in which the course of instruction was formerly superior to what it is at present? Does he mean to say that the Philadelphia schools give a course of instruction inferior to what was given in former times? If such is the case, I regret to hear it; and I have always entertained the contrary opinion. But as he is a resident of that city, he should certainly know better than those at a distance.

It seems then that the Convention was of opinion that *some* of the schools are giving an inferior course of instruction, and that it is only that portion of the profession educated at these schools, which is deteriorating; while a progressive improvement is taking place among those educated at the better schools. And what is the remedy proposed? That the course of study in the inferior schools should be brought up to the standard of the superior, by the labors of which it is admitted the profession is improving? There would be some reason in this. The plan of the Convention however, is to compel those which are already doing well, to do better, with the expectation that those which are doing badly, may be induced to advance to the point of doing well. viz: as far as the best schools are at present. Now, this we regard as a vain expectation as long as public opinion remains in its present condition, with respect to the profession and science of medicine. Medical schools have been in operation in the New England States, and in the State of N. York, in many of which the course of instruction is brief, and the expense of obtaining a degree considerably less than in the large cities. The legislatures of many of the new States have granted charters for medical colleges in towns at least as large as Woodstock, and Pittsfield, and Geneva, and Brunswick, and Castleton, and Hanover. The prices of tickets too are very much the same. Fifty or sixty dollars in cash for a full course of lectures; and in some of them twelve per cent. additional for credit; which means a promise to pay when ever it is perfectly convenient. The right of the legislatures of these new States, to charter colleges, cannot be disputed; and as long as charters are granted without imposing any restrictions upon the professors, as to charges and duration of the courses of lectures, it is natural and unavoidable, that the regulations will be adapted to the condition of society in each particular locality. The very existence of a medical school, in a small town, such as Geneva, depends upon the cost of obtaining a Degree not being as great as in the large cities. If the fees of the professors were the same as, and boarding no cheaper than, in the city of New York, the medical school at Geneva would very soon cease to exist. No doubt, "this is a consummation

devoutly to be wished for," by the professors in the New York city schools. But it is obvious that the schools in the smaller country towns cannot be put down, as long as public opinion and the several State legislatures sustain them, unless some suicidal act of the professors themselves, should effect their destruction. If the general community, and the students who attend, are satisfied with the education obtained at these smaller schools, there is no other power but their own folly, capable of destroying them. When Lord North and Mr. Fox broke up their administration, by the introduction into Parliament of their celebrated East India Bill, Mr. Sheridan remarked, "that he had often heard of people knocking out their brains against a wall, but this was the first time that he had known of people building a wall expressly for the purpose of dashing out their brains." If the National Convention calculates that the schools in the interior of the country, will be terrified into closing their doors by the paper bullets of their resolutions, they will be most grievously disappointed.

It would occupy more space than can be spared at present, to notice all the petty cavils of the two gentlemen who have undertaken the defence of the Convention. I shall very briefly advert to a few. The writer in the "Medical News" thinks that physicians of superior education residing amongst an illiterate people instead of descending towards their level of intelligence, will refine and improve them. It would be interesting to witness the transformation of a whole community from a state of ignorance, by the exertions of a few physicians. We rather think that the legislature of Pennsylvania has adopted a better plan, when it established a common school system. He has not reflected upon the influence of constant intercourse with uneducated persons, and how much more easy it is to forget than to acquire knowledge.

The New York writer makes a dreadful lamentation over my statement, that good must result from the competition of the new with the old schools, if no very dishonorable means are resorted to, for the purpose of alluring students to their halls. The terms honorable and dishonorable will have different significations attached to them by different persons. I have heard the faculty of one of our most respectable medical colleges, called pirates, for a course of conduct, which by many other gentlemen was not deemed of such enormous turpitude as to place them beyond the pale of good society. There is, therefore, no possibility of replying to the "God help us," of this author, inasmuch as we cannot have a definite understanding of the precise meaning of our terms.

The insuperable obstacle in the way of this reforming movement is, that public opinion is opposed to it. The doctrine of free trade, at which the Philadelphia gentleman sneers, is applied with more unanimity to science than it is to commerce. This is

demonstrated by the action of our State legislatures. In several of the States, in which acts of incorporation of the regular faculty existed, by which the physicians had a right to say, who should, and who should not practice, and could impose a fine upon illiterate and irregular practitioners who had not procured a license, the laws have been either actually or virtually repealed; and the legislature of Missouri has capped the climax, by passing a law, one section of which declares, "every person, or co-partnership of persons, who shall follow the practice of medicine for a livelihood, in whole or in part, is hereby declared to be a physician." As long as such is the state of public opinion, it is the height of folly for the medical faculty to endeavor to prohibit all but liberally educated men from graduating at our colleges; or to compel the smaller country schools to adopt the regulations of those located in large cities. If the legislatures of all the States would enact laws for the government of the medical profession, which would allow none but men of proper education to practice, the improvement desired by the reformers, could be, to a considerable extent effected. But until this is done, I have no hope nor expectation, that the nature of man will be so much changed, that the annual recommendations of conventions, or associations, will overturn a state of things which has its foundation in the elementary constitution of society. There is a natural progression of affairs which cannot be suddenly altered, except by the force of legal enactment. Under this law of progress, those of our students of medicine who have the best talents, and the best preliminary education, will finish their medical studies at the colleges which have the greatest celebrity, and strive to qualify themselves for distinction amongst the most eminent of the profession, and for professorships in the first schools; while others with lower anticipations, will be satisfied with inferior opportunities for improvement. Our New York brother can thus perceive in what way superior scholarship will be advantageous to its possessor.

I have now concluded my observations on this very exciting question of reform; and with the highest respect for the gentlemen who have noticed my former "Remarks," I would beg leave to say, that they must not think to prevent those of us who differ from them as to the practicability of their measures, from expressing our opinions, by exclamation and vituperation. There is much greater probability of converting us from the error of our ways, if we are in error, by temperate discussion, than by violent invective.

Died, in St. Louis, Mo., on the 14th of August, after a short illness, James D. Shannon, M. D. Dr. S. graduated in Transylvania Medical School at the last session.

CONTENTS OF WESTERN LANCET,

FOR OCTOBER AND NOVEMBER, 1847.

PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—Report of Cases from the Medical Ward of the Cincinnati Commercial Hospital. By JOHN P. HARRISON, M. D., Professor of Theory and Practice of Medicine, in the Medical College of Ohio. - 213

ART. II.—Medical Reform.—Minutes of the Proceedings of the Medico-Chirurgical Society of Cincinnati. Reported by JOHN H. TATE, M. D., Secretary. - - - - - - - - - 220

ART. III.—An instance of the Heart situated on the Right Side. Reported by DR. H. SAUNDERS, of Hopkinsville, Ohio. - - - 226

ART. IV.—"Winter Fever" in Arkansas. By DR. BELL, of Bentonville, Arkansas. - - - - - - - - 227

PART II.

REVIEWS AND NOTICES.

ART. V.—The Virginia Springs, with their Analysis; and some remarks on their character, together with a directory for the use of the White Sulphur Water, and an account of the diseases to which it is applicable; to which is added, a Review of a portion of Wm. Burke's book on the Mineral Springs of Western Virginia, etc., and an account of the different routes to the Springs. By JOHN J. MOORMAN, M. D., Resident Physician at the White Sulphur Springs. Philadelphia: Lindsay & Blakiston. 1847. 12mo. pp. 219. - - - - 229

ART. VI.—Proceedings of the Ohio Medical Convention, held at Columbus on the 18th of May, 1847. Columbus. S. MEDARY. 1847. pp. 59. 232

ART. VII.—Constitution, By-Laws and Proceedings of the Medical Association of Adams, Brown and Clermont Counties, Ohio. Arranged by the Committee of publication, Cincinnati, pp. 22. - - - 233

ART. VIII.—Wood's Quarterly Retrospect of American and Foreign Practical Medicine and Surgery. April to July, 1847. Vol. 1. No. 1. New York; Richard and George S. Wood. 8vo. pp. 64. - 234

ART. IX.—A Practical Treatise on the Diseases of Children. By D. F. CONDIE, M. D., 2d edition. Philadelphia, Lea & Blanchard. 1847. 8vo. pp. 657. - - - - - - - - - 234

PART III.

AMERICAN SUMMARY.

1. Treatment of the Yellow Fever at Vera Cruz, - - - - 235
2. Treatment of Deafness, - - - - - - - - 235
3. Sulphate of Quinine in Traumatic Tetanus, - - - - 236
4. Efficacy of Ox-gall in removing Fœces, - - - - - 237
5. Epilepsy, - - - - - - - - - - 237
6. Ship Fever as it appeared in Philadelphia, - - - - 239
7. The Mexican Surgeon General's Report, - - - - - 240
8. Abolition of the Concours, - - - - - - - 241
9. Doctoring of Kings, &c., - - - - - - - 241
10. Kreosote in Vomiting, - - - - - - - - 242
11. Hydrometra or Uterine Dropsy, - - - - - - 243
12. Ricinic Acid, - - - - - - - - - 243
13. Pseudo Doctors, - - - - - - - - - 244

PART IV.

FOREIGN SUMMARY.

14. On the Subperiosteal Extraction of Bones, - - - - - 245

15. Prevention of Infection from Wounds in Dissection, - - 246
16. On Ectropion and a new way of Operating for it, - - 247
17. Hyposthenics in Tubercular Phthisis, - - - - 247
18. Grisolle's Opinion of Typhoid Fever, - - - - 248
19. Albuminuria in Pregnant Women, - - - - 250
20. Inhalation of Æther in Traumatic Tetanus, - - - - 252
21. Ipecacuanha in the bites of venomous animals, - - - 255
22. Treatment of Erysipelas by linear Blisters, - - - - 255
23. Treatment of Ganglion, - - - - - - - 256
24. Dysmenorrhœa, - - - - - - - 256
25. Treacle in Burns, - - - - - - - 257
26. Arsenic in Cancerous Diseases, - - - - - 257
27. Relative Value of different Medicines in Syphilis, - - - 258
28. New method of procuring Insensibility under Operations, - - 258
29. Nitrate of Potash in Purulent Discharges, - - - - 259
30. Secretion of Tears in Infants, - - - - - 259
31. Detection of Mercury in the Pus from a Bubo, - - - - 259
32. Peculiarity of Mercurial Salivation, - - - - - 259
33. A pleasant substitute for Epsom Salts as a Purgative, - - 259
34. Iodine detected in the Testicles, - - - - - 260
35. Depletion in Hydrocephalus, - - - - - 260
36. Influence of the Weather upon Health, - - - - 261
37. Influence of the periods of the Day upon Births and Deaths, - 262
38. Treatment of Cancer, - - - - - - - 263
39. Lithotrity, - - - - - - - - 263
40. Alkaline Urine in Health, - - - - - - 263
41. Case of Poisoning with Arsenic. - - - - - 264

PART V.

NOTICES OF EMPIRICISM.

1. Empirical Advertisement. - - - - - - - 267

PART VI.

EDITORIAL DEPARTMENT.

Ignorance of a Phrenologist, - - - - - - - 268
Effects of Ergot on the Fœtal Heart, - - - - - - 268
Medical Appointments, - - - - - - - - 269
The American Medical Almanac, - - - - - - 270
Adulteration of Medicines. - - - - - - - 270

THE WESTERN LANCET.

VOL. VI. CINCINNATI, NOVEMBER, 1847. NO. IV.

PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—*Report of Cases from the Medical Ward of the Cincinnati Commercial Hospital.* By JOHN P. HARRISON, M. D., Professor of Theory and Practice of Medicine, in the Medical College of Ohio.

The following cases are reported to subserve three ends—First, to illustrate Pathology; second, to exhibit the method of treatment; and, third, to show the connection between the ratio symptomatum and the pathological anatomy. The pathology of a case of disease is made up of the series of phenomena and changes of the living human body, which is in progress at any given time of examination. Morbid anatomy exhibits the results of the previous procession of phenomena and changes seen whilst the patient was under treatment.

In a careful consideration of our patient's attack, etiology, symptomatology, and the effects of remedies, must be respectively regarded: the necroscopic appearances, of course, are a matter of after consideration, when, as a living man, he has ceased to occupy our professional attention. The etiology and symptomatology, with the effects of remedies, may merely point to a disordered state of function; or they may indicate, especially in conjunction with physical signs, structural lesion.

Case 1st.—Typhoid Fever.—Amos Bush, a millwright—43 years of age—admitted May 30, 1846. Etiology—not stated. Symptomatology—diarrhœa, of three weeks standing; splenic enlargement; abdominal tenderness on pressure; lenticular spots over front aspect of body; pulse 120, rather full; skin

moist; tongue dry, coated towards the root, and red at the tip. Treatment on admission. Small doses of Calomel, ipecac, and prepared chalk every second hour, with a blister, 8 by 10 inches, to the abdomen.

31st. Slight amendment; diarrhœa continues—stools thin—tongue still dry; pulse frequent, but not weak. Remedies continued.

June 1st.—No improvement. The eighth of a grain of sulphate of morphiæ was given, in addition to the other remedies every third hour.

2d.—Died.

Sectio cadaveris, fourteen hours after death.

Abdomen.—Omentum very turgescent; ileum, to the extent of two feet at the lower extremity, was intensely red, in the external as well as internal coat; several ulcers, of six lines in length, were seen in the mucous coat of the lower part of ileum; peritoneum, covering the fundus of the urinary bladder, very red; slight extravasation of blood into the mesocolon at the head of the colon; several small ulcers at the caput coli; mesenteric glands enlarged; spleen, three times its normal size, and of the color of nutmeg. Other viscera healthy.

This was a genuine case of Typhoid Fever. The five pathognomonic phenomena of this disease were present. 1. The Diarrhœa: 2. The Lenticular Spots; 3. The enlarged Spleen; 4. The enlarged Mesenteric Glands; and 5. The ulcerated glands of the lower portion of the Ileum.

The organic changes in this case were not in themselves, sufficient to explain the rapid progress of the disease to a fatal termination, aside from the prostrating action of the frequent alvine discharges, and the shock the nervous system sustained in the protracted febrile orgasm. The removal of the patient from his boarding house, doubtless, accelerated the issue. *It may be laid down as a sound practical axiom, that the removal of a fever patient, during the severity of his attack, is, in every instance, accompanied with very great risk.* According to our observation very few recover after the exertion of mind and body incident to a transfer from their homes to the hospital, if removed during a severe onset of fever.

Case 2d.—Dysentery.—James Early—boatman—age, 37 years—directly up the river from New Orleans—was admitted May 11, 1846. Whilst in Orleans was treated for dysentery in Charity Hospital. During the passage up the Mississippi and Ohio, he had very frequent alvine discharges.

Symptoms—slight pain, on pressure, along the transverse arch of the colon; tormina and tenesmus not very urgent; pulse 88 a minute; skin not morbidly hot; tongue coated with a yellow fur; thirst great; strength much reduced; sleeps but little.

Treatment.—The following mixture was given:

℞ Bal. Copaib. ʒi.
Cret. Prep. ʒss.
Syrup ʒi.
Ol. Ricini ʒij.
Tinct. Opii ʒi.
Ess. Cinnam. ʒi,
Mucilage ʒviij.—dose ʒss every three hours.

12th. The mixture was omitted, and the following prescribed.

℞. Pil. Hydrarg ☿ ss.
Ipecac gr. ij.
Opium gr. iij—to be made into a pill, and taken at night.

13th.—Tongue looks better; four stools, of the same character of blood and mucus, as heretofore.

14th.—Considerable tormina; the copaiba mixture was given again.

15th.—The blue mass with opium was given; no improvement; alvine discharges frequent.

16th.—Four grains of opium as a suppository.

18th.—The patient is worse; the following was given every third hour; hydrarg. cum creta grs. ij. and pulv. Doveri gr. ij. M.

19th.—Sinking. Brandy was given; a suppository of opium; fifteen of Dover's powders with ten grs. of prepared chalk every third hour.

20th.—Stools frequent and bloody—fast verging to a moribund state.

21st.—Died.

Sectio cadaveris, fifteen hours after death.

Abdomen.—Externally the intestines presented a leaden hue; the entire tract of the colon, on the internal coat, was of a dark appearance; the lower half of the ileum was of a deep red color, with some small ulcerated spots visible along the lower portion. The other vicera healthy.

Reflections.—This was a case of frequent occurrence on our western waters. The reckless, exposed, mode of life of our boatmen often leads to such attacks. The long standing of the case was a discouraging consideration in its cure. Per-

haps, if a slight persistent, constitutional mercurial impression had been instituted, even after his admission into our hospital, his recovery might have been secured. The alterant interposition of mercury is the great, and generally effective, means of arresting the structural lesions that occur in severe cases of dysentery. The profession is tempted, of late, to overlook the well established reputation of mercury in such attacks; but the concurrent testimony of the past should not be disregarded, and in our treatment of dysentery we should always remember that there is no practice so well authenticated as the mercurial. In the administration of calomel in this disease opium should be conjoined after the more immediate inflammatory stage has abated. Local bloodletting in the acute stage should never be omitted. A large blister, after the subsidence of the more acute stage, we have seen of signal benefit, but such a mode of counter irritation subjects the patient, very often, to great distress, from the frequent demands made by the disease upon his change of posture. Applications of a warm stimulating kind, such as flannel wrung out of hot whiskey, give great relief.

Case 3d.—Enteritis.—Samuel Butcher, a shoemaker—25 years of age—entered the house June 1. He states that he was taken sick two weeks ago with severe diarrhœa, which lasted a while and then stopped. Previously, for two months, had from time to time, been subject to bowel affection.

Symptoms.—Great emaciation—very thirsty—tongue much coated—vertigo—slight febrile excitement—pulse 100 a minute—no pain on pressure of the abdomen.

Treatment.—Small doses of calomel and ipecac were given.

2d—Three operations, of a thin, yellow-brownish character—no pain accompanying the alvine discharges—pulse less frequent. Calomel and Dover's powder, in two grain doses given every second hour.

3d.—Patient more emaciated; pulse weak. Calomel, one fourth of a grain, sugar of lead, three grains, and Dover's powder, four grains, were given every fourth hour.

5th.—Worse; copious bloody discharges from the bowels; no pain, however, in the abdomen; has some desire for food! Ten grains of sugar of lead, with a drachm of laudanum, in an ounce of starch, were ordered, as an enema.

6th.—Several bloody stools were passed to-day. The patient is fast sinking. Thirst great, wishes food. Arrow root and brandy directed. Calomel, opium and acetate of lead, in small doses, every third hour. Continue astringent injections.

7th.—Alvine discharges not bloody. Pulse, small and frequent. Medicines the same as yesterday.

8th.—Carb. ammoniæ, three grains in mucilage, every two hours. Extremities cold. Singultus.

9th.—Delirium—death.

Sectio cadaveris, eight hours after death.

Abdomen.—Colon hypertrophied throughout its whole extent; all the coats thickened, but in an especial manner the mucous; numerous ulcers, penetrating deep into the hypertrophied mucous coat, studded the whole length of the colon; the lower portion, one-third, of the ileum was likewise hypertrophied and ulcerated. The stomach, duodenum and jejunum healthy. Cranium.—Several ounces of serum between the membranes on the hemispheres; the venticles were distended with serum.

Reflections.—It is difficult to determine the length of time that the very great structural lesion existed in the ileum and colon. The remedies employed did not seem to effect any arrest in the malady. A mercurial influence was attempted, but we failed in securing it. Two singular features existed in this case, one was the absence of pain in the abdomen, and the demand for food. The stomach did not, till near the close of the disease, show any sign of sympathy with the serious organic changes going on in the bowels. On the last day there was singultus, which annoyed the patient considerably—but previous to that there was no symptom, neither nausea, vomiting, or even anorexia, that pointed to the great and fatal lesion of structure. The absence of pain, even upon pressure, is a feature of the case highly interesting. Andral long since pointed out this fact, as seen occasionally by him, in inflammation of the mucous coat of the intestines.

Case 4th.—Abscess of the Brain.—W. Archbold—age, 28 years—a laborer—has been complaining of headache for several days. Came under treatment, May 28, 1846. For several months has been growing more stupid.

29th.—Pain in the head augmented—says that it is like a tight band round his head; pulse small and weak; face suffused and bloated; eyes natural; memory nearly gone; hearing impaired. Cold douche was repeatedly applied to the head, and he was purged.

30th.—Delirium; pulse small and frequent; pupils not affected; slight paralysis of the left angle of the mouth. Head ordered to be shaved, and a cap blister applied to the scalp.

31st.—Worse; purged with calomel.

June 1st.—Has a vacant stare; superior palpebra of left eye paralyzed; left angle of the mouth continues so; insensible to all objects; involuntary discharges from bowels; face much flushed; pulse 100.

2d.—Left pupil dilated to a slight extent.

3d.—Deglutition entirely gone: trismus.

4th.—Died.

Sectio cadaveris, four hours after death.

Head.—The venous and arterial vessels of the membranes of the brain were loaded with blood; lymphy exudation in the arachnoid on the hemispheres; great engorgement of the vessels in the cortical substances of the brain. Much engorgement of vessels of the membranes covering the medulla oblongata and spinalis; deposition of plastic lymph about the base of the brain. The ventricles were filled with serum; half a drachm of blood was effused on the right plexus choroides; there was a coagulum of blood, with pus, in the right middle lobe of the brain; the blood and pus amounting to about an ounce.

Remarks.—This man had been intemperate—this, however unfortunately, is no novel matter in, and out of the hospital. From the history of the case we infer that softening of the brain had preceded the extravasation of the blood into the middle lobe of the right hemisphere. The cerebral substance around the lesion was softened, and indicated that the purulent deposit had been slowly accruing, whilst the coagulum appeared to have supervened on this.

There was, most evidently, a much larger quantity of blood filling the vessels of the brain than we usually meet with, although serous effusion to a distinct morbid extent occupied the ventricles.

Case 5th.—Peritonitis.—W. Crawly—age, 24 years—a farmer—first admitted June 3d, 1846. Says that he has had bad health for a year—repeated attacks of fever and ague during that period. Enlarged spleen; severe diarrhœa—ten stools during as many hours. Under the use of mercurial alterants, with opiates, and the copaiba mixture he was apparently restored to health.

July 6th.—Was re-admitted—suffers great pain in the abdomen; one grain of morphine was given in an ounce of starch water as an enema—copaiba mixture.

9th.—Improved—diarrhœa pretty well arrested.

18th.—To this date seemed improving. To-day pain severe in the abdomen; no stools for thirty-six hours.

19th.—Very severe abdominal pain—cannot bear the least pressure over the lower part of the abdomen; pulse frequent and weak; great prostration.

21st.—Vomiting;—pain still great in the abdomen.

23d.—Abdomen tense, hard and somewhat retracted; pulse very frequent—vomits a dark fluid; refuses to take medicine; fast failing.

24th.—Died.

Sectio cadaveris, twelve hours after death.

Abdomen.—Extensive agglutination of the intestines from plastic lymph; peritoneum covering the bowels of a dark red aspect: also the peritoneum on the walls of the abdomen; large effusion of lymph in the cavity of the abdomen; the mucous surface of the stomach, and of the upper portion of intestinal tube of a deep red hue; the mesenteric glands were enlarged, also the spleen; both to a slight degree.

Case 6th.—Indurated Liver.—M. Mallon, boatman—32 years of age, was admitted July 30th, with tertian intermittent and diarrhœa.

August 1st.—Intermittent arrested by the quinine given during the last two days. Diarrhœa persists, though not very severe. Blue mass, ipecac and morphine were given; bowels checked.

2d.—Pulse weak; stimulants administered; but he very unexpectedly died.

No morbid appearance was seen in our necroscopic examination, but an indurated liver. This patient took quinine in pretty free doses, of ten grains each, and also about two grains of morphine during the three days preceding his death. We were puzzled in solving the suddenness of his dissolution; perhaps the structural lesion of the liver may clear up the mystery to some minds, but the enigma remains unsolved in our view of the case.

Case 7th.—Organic disease of the Brain.—P. F. Williams—age, 35 years, a tragedian; came into the house June 29th, 1846. But little could be ascertained of the history of his case, only that he had been ill about a month.

Symptoms on admission: is very dull in his perceptions; cannot answer a question readily, from want of comprehension; mind very incoherent, general appearance like an insane man; when he attempts to walk he drags his legs. The digestive function, alvine evacuations, temperature of skin and pulse, both in rhymth and frequency, natural.

July 1st.—Was seized with general convulsions; legs and

arms in perpetual motion; has vomited several times; intelligence null.

2d.—Died.

Sectio cranii—no other part examined. Slight turgescence of the anterior lobe of left hemisphere of the brain; in the cortical part of the anterior lobe of the left hemisphere, a tuberculous tumour, three fourths of an inch in diameter, was found; also a similar tumour of equal size near the commissura mollis.

ART. II.—*Medical Reform.*—Minutes of the Proceedings of the Medico-Chirurgical Society of Cincinnati. Reported by JOHN H. TATE, M. D., Secretary.

THURSDAY, July 18th, 1847.

The Society met at the residence of Dr. Harrison.

Dr. Vattier, the Vice President, took the Chair.

Dr. David Judkins, lately the representative of the Society at Philadelphia, presented his report, which embraced a condensed account of the proceedings of the Medical Convention recently held in that city.

He also read the whole of the report made to that Convention under the resolution—"that it is desirable that a uniform and elevated standard of requirements for the degree of M. D., should be adopted in all the Medical Schools in the United States."

After the reading of these reports, the President declared the general subject of Medical Education to be open for discussion.

Dr. Harrison thought the profession too much abused by itself; it was quite a mistake to assert that the profession in this country occupied a lower position than it once held, or than it now occupies in foreign countries. He reverted to the early history of the profession in the West. At that time there were fewer Medical Schools, and a smaller number of branches taught in them than at present. Then most of the prominent practitioners were under graduates. Cullen was read by a few; but old Thomas was the favorite author, and his work, with a medical lexicon, constituted the whole library of many. In moral dignity and purity there had also been a great advancement. In 1814, almost all prominent medical men were avowed infidels; and a large number were adicted to habits of intemperance.

He thought the profession at large in this country, would bear a very advantageous comparison with the country practitioners in Spain, England or France. In regard to the latter country, he referred to the authoratative reports lately made to the medical congress, which assembled in Paris. Any one who would examine that document would see that the profession in France, out of Paris, were far below their brethren in this country in point of acquirements.

In regard to the branches to be taught in our schools, he thought it should be made obligatory on the student to dissect, and in cases where it was possible, to attend upon clinical lectures. He was opposed to adding such studies as botany and zoology to the requirements for a degree. Where the minds of the student is directed to such a multiplicity of objects, he thought it was apt to master none.

Dr. Lakey could not admit the justness of the comparison which Professor Harrison had made between the practitioners of our country, and those in Europe. He alluded to a work lately published by Mr. Dwight, in which facts were stated—particularly in regard to the state of medicine in Germany—which would prove the very opposite to that which had been stated.

In regard to infidelity—he stated that in 1814, the profession along the Atlantic coast were not generally infidels; and mentioned particularly, the name and influence of Dr. Rush.

Dr. Wm. Judkins could see a great improvement in the profession within the limits of his experience. He thought there was still room for progress, and adverted to two obstacles which seemed to him to impede the progress of Medical Science. 1st. Allowing young men to enter our offices as students of medicine who had not received a sufficient general education: 2d. Uniting in the same individuals the business of teaching, with the power of conferring degrees.

Dr. Robt. Thompson, of Columbus, being present, was called upon for an expression of his views.

He remarked that he had spent much thought, and lately written a paper upon this subject, which would be published among the proceedings of the Ohio Convention.

In that paper he had expressed the opinion that a State Medical Society should be formed, which should exercise a general supervision over the subject of Medical Education within our State. A committee should be appointed to examine young men desirous of commencing the study of

medicine, to see that they possessed the necessary preliminary qualifications.

In this examination he would be inclined to estimate more highly attainments in mathematics and natural science than classical knowledge.

The examinations for degrees should be made by a central board, composed in part of members chosen from the profession at large, and in part of representatives from the various Medical Schools.

He was in favor of electing the professors in the medical schools for a limited, instead of a indefinite period of time; and thought the best manner of selecting them was by the French system of concours.

In giving instructions to medical students, they should be impressed with the distinction which exists between merely reading, and studying books. As a general fact, he thought most young men read too much, and reflected too little. A few well chosen volumes should be put into their hands, and them they should be made as completely to master, as if the books were to be blotted out of existence as soon as they passed from their hands.

Dr. McIlvaine was disposed to congratulate the profession upon the evident approach of a new era in medicine. It was plain that the dicta of the schools were loosing their influence, and that the thinking men in the profession were coming up to the investigation of truth after the true Baconian method, "proving all things and holding fast that which was good."

Dr. Harrison was opposed to the separation of teaching from the power of conferring degrees. He thought the professors better qualified than any other members of the profession to conduct the examinations, and doubted whether students would consider a diploma of much value which had not attached to it the great names of their medical instructors.

Dr. David Judkins was decidedly in favor of breaking up the connection between teaching, and conferring degrees. He did not see why an arrangement might not be made by which the professors should attach their names to the diplomas after the students had been examined, and found qualified by a deputation from the profession at large.

At this period of the discussion the subject was dismissed until the next meeting.

August 4th.

The Medico-Chirurgical Society met at the residence of Dr. Vattier. Prof. Harrison was called to the chair.

Dr. Lakey read a paper entitled "Facts and remarks upon the state of Medicine in the United States, with observations on the preliminary education of medical students."

He opened the subject by referring to the requirements as adopted by the late Philadelphia convention. They were these:—1st. A good English education; 2d. A knowledge of Natural Philosophy; 3d. Mathematics, including Algebra; 4th. Latin and Greek.

In regard to the first all would agree. Of Natural Philosophy he thought botany and chemistry all that should be insisted on. He did not consider the higher branches of mathematics necessary. In regard to Latin and Greek, the people in this country did not expect, or require their physicians to be acquainted with them, and he considered it absurd in a high degree in the profession to endeavor to enforce such a requisition.

The condition of the profession was such as to alarm every true friend of medical science. It was, relatively, much lower in the scale of knowledge than it was forty years ago. The people had grown more intelligent, but the profession had not improved in similar ratio. He referred to the repeal of the protection laws in New York and Ohio, to show that the profession was not as much respected as formerly.

He thought the standing of physicians would be much elevated, if they were to pay more attention to the cultivation of general literature. He was in favor of reviving the degree of M. B., and would not confer that of M. D. on any man under forty.

A board of examination should be formed composed in part of citizens, and in part of members of the profession, to examine young men desirous of commencing the study of medicine, and without a certificate from them of the necessary preliminary qualifications, they should not be allowed to enter a Medical College.

Dr. Harrison considered the object which should be had in view in a preliminary education to be threefold: 1st. To discipline the mind; 2d. To afford the means of acquiring knowledge; 3d. To confer the power of communicating this knowledge to others. The study of the English language alone was insufficient, but in his opinion, the study of the ancient classics did afford the necessary discipline. The efforts of Rush and Grimke, to lessen our estimation of this course of study were based upon mistaken views of the objects of education; and they were themselves good illustrations of the

fallacy of this argument; inasmuch as they were using the very weapons which this course of mental training had given them to induce others not to adopt it.

He thought the members of our profession paid too little attention to the attainment of such a facility in the use of our native tongue, as would enable them with force and perspicuity to express their opinions.

He could only account in this way for the little influence which some men of decided ability exercised upon society.

He regarded it as the business of the private preceptor, rather than of the public teacher, to see to the preliminary education; and he could not see but the colleges would be compelled to receive such students, however ignorant, as the preceptors might choose to send them.

Dr. Murphy looked upon the paper as making a covert attack upon the study of the dead languages, which he conceived to afford the best possible means of disciplining the faculties.

Most men who had been eminent in our profession had been classical scholars, such men as Rush and Sydenham. He did not feel apprehensive in regard to the condition, and prospects of the regular profession, which the essayist had manifested. On the contrary, from the interest which was every where shown on the subject of Medical Education, and the fraternal sympathy which was springing up, he augered the happiest results.

He thought it useless to attempt any longer to control medical affairs by legal enactments.

Dr. Baker had once been a great stickler for preliminary education, but since he had understood that Dr. Drake and the late Dr. Eberle had both begun the study of medicine with a very limited knowledge of even the English language, his views had undergone a change. He was now disposed to allow any one to study medicine who might wish to do so.

Dr. Wm. Judkins was pleased with the paper, although he could not in every thing agree with its author. He was gratified to witness the interest which the subject of education had excited, and thought that Ohio had contributed her full share to the general awakening. He would be disposed to insist upon the study of Greek and Latin.

He thought the private teachers should see to the matter of preliminary education.

Dr. Tate regarded the essay as containing many valuable thoughts: among these, he would particularize the suggestion

that medical men should pay more attention to attainments in general literature. It was certainly true that a man might be a learned physician, and yet take quite an inferior position among educated men. His professional studies were of such a nature as to be seldom introduced with propriety into conversational circles, and therefore the public, as a general thing, would assign to the medical man that position which his knowledge of subjects beyond the limits of his profession, would be calculated to bestow.

He expressed his high satisfaction of witnessing the great revival which was taking place upon the subject of medical education; and particularly at the attention which was given to the very important branch of preliminary education.

Upon the details of these subjects we must, of course, expect a diversity of opinion; but he thought the high object for which we are contending would in a great measure be accomplished—whatever differences there might be as to particulars—if the profession was once thoroughly stirred up throughout the land, to the necessity of a more thorough education.

In regard to the propriety of introducing the dead languages into the course of preliminary studies, there appeared to be quite a variety of opinions. It seemed to him that the great object to be had in view in training the faculties was to prepare them for the investigation of truth. Language could only be considered as the mere clothing of our ideas, and it was difficult for him to see what there could be in directing attention to the mere dress of thought, which would be calculated so wonderfully to develope, and discipline the faculties; or to enable the mind easier to discern and lay hold of the great truths in science.

The Greeks themselves had no such discipline, neither had Hunter or Shakespeare.

He was not disposed to question that some, and even important advantages might arise from classical studies, but he was fully persuaded that a very undue importance was given to them, and entirely too much time consumed in attention to them, in most of our schools and colleges.

In regard to the relative duties of private preceptors, and public teachers, he differed very widely from the views which other gentlemen had expressed. The professors in our medical colleges might do much more than was done to raise the standard of medical education. It was true they were compelled to take such students as were sent to them by the

private preceptors, but they were not compelled to graduate any who were not qualified. It was the diploma which placed the student upon a level with the best of the profession. The schools seemed to him to have entered upon an ignoble rivalship to see which could have the greatest number of pupils; and in a great measure to have lost sight of the higher objects for which they were instituted.

He thought this evil would in a great degree be remedied, if the power of conferring degrees was given to a board composed in part of teachers, and in part of representatives from the profession at large.

Dr. McIlvaine said there still seemed to be lingering in the breasts of some gentlemen a wish after the old system of protection from the state. For his part he was opposed to the whole protection policy, and did not see that the profession needed any thing of the kind. He had great faith in the practical good sense, and sound judgment of the people, and thought that honest intelligent effort in a good cause—as a general rule—always had been, and always would be appreciated.

Dr. Lakey did not wish to be considered as opposing the study of the dead languages, but he did oppose making them a necessary part of a preliminary education.

ART. III.—*An instance of the Heart situated on the Right Side.* Reported by DR. H. SAUNDERS, of Hopkinsville, Ohio.

The phenomena of a heart on the right side of a human being, must be my apology for addressing you. I had a patient who was laboring under a fever of synochal grade, though not of very vehement character; and in the course of my examinations of his chest, I placed my hand on the left side, expecting to feel the pulsations of the heart, as his whole frame was agitated by its movements, but to my hand its actions were inappreciable. I then placed my ear over the usual cardiac region and could very plainly distinguish the systole and diastole of the organ I was in search of; this indistinctness I ascribed to the thickness of the parieties of the chest, my patient being very fleshy. In the course of examinations of his chest, my right hand was accidentally applied with its back to the parieties of the right side, when, judge of

my surprise, the action of his heart was very palpably felt. I mused on the case some moments, then asked my patient if he ever had disease of any portion of the thorax,—he answered no, he had never been sick before; and after making all the inquiries I deemed necessary relative to his previous health, and which he assured me had always been good, I asked him if he was aware on which side of his body his heart was; he answered thus,—he had always heard people say, to feel the heart you must put your right hand over the left breast, but, sir, said he, I have always had to put my left hand on my right breast to feel mine. I regarded his reply to my question a confirmation of my inquiries and conclusive as to the locality of his heart.

It was on the 21st of June I ascertained the foregoing facts; since then I have repeatedly questioned my patient, and also examined his breast, but find nothing to militate against my conclusions that the heart is on the right side, the apex tilting against the sixth intercostal space, a little external to the line of junction of the cartilages with the ribs, thus being lower than when in their usual place. From this point it inclines upward and to the left, as high as the fourth rib, cartilage and sternum, the left ventricle being to the right of the median line.

The age of my patient is twenty-five; height, five feet four inches; when in health of very ruddy complexion, full habits of body, great muscular developement, and inclined to obesity, somewhat.

ART. IV.—"*Winter Fever*" *in Arkansas.* DR. BELL, of Bentonville, Arkansas, writes as follows:—

In the West, during the winter season, all diseases are termed by the vulgar, Winter Fever, and nothing will elevate a physician in the estimation of a gullible community more readily, than to be able to treat *Winter Fever* successfully. The most fatal attacks are inflammation of the brain, characterized, of course, by pain in the head, &c. These cases are remarkable,—as met with in Missouri, Arkansas and Texas. A man, apparently in sound health, will be attacked with perhaps a slight chill and pain in the head; when reaction takes place he becomes delirious, which increases to furious mania, and in twenty-four to thirty-six hours the patient is a corpse.

In *post-mortem* examinations there is but little sign of meningeal inflammation; but in most cases the disease seems to have centred in the lower and middle of the substance of the brain. In some cases extensive suppuration in the neighbourhood of the medulla oblongata. These cases appear mostly amongst the poorer class of citizens; those who live in open, bad houses, and generally on government land—*squatters*. I have noticed no peculiarity in the constitution of the cases I have seen; except in those cases of chills that have been neglected, until I may say, the disease has assumed a chronic character. In these an inflammatory attack of any kind is apt to prove fatal.

Treatment is doubtful; bleeding has succeeded in the hands of some, but is rather a doubtful remedy. Those who seem most successful treat the disease with calomel, tartar emetic and opium, with the assistance of blisters, &c.; and quinine in the convalescing stage. The more intelligent class of physicians generally agree, that more cases are fatal than otherwise, in spite of the best treatment.

PART II.

REVIEWS AND NOTICES.

ART. V.—*The Virginia Springs, with their Analysis; and some remarks on their character, together with a directory for the use of the White Sulphur Water, and an account of the diseases to which it is applicable; to which is added, a Review of a portion of Wm. Burke's book on the Mineral Springs of Western Virginia, etc., and an account of the different routes to the Springs.* By JOHN J. MOORMAN, M. D., Resident Physician at the White Sulphur Springs. *Philadelphia:* Lindsay & Blakiston. 1847. 12mo. pp. 219.

This little volume contains many things of interest to the profession, and many others, we imagine, which will prove of little value to any class of readers. Among the latter we may class the long-winded title page—which of itself is an analysis of the book—a beginning which never sweetens very greatly the temper of a critic.

After some judicious remarks on the absurdity of using mineral waters indiscriminately, the author proceeds to make some observations in relation to their *medical efficacy*, in a general sense. We are told, in the first place, that mineral waters will cure many diseases which the ordinary remedies of the shops will not (p. 25); and on p. 28 the modus operandi is discussed. The main point is, that these remedies are absorbed into the circulation, and are applied directly to the diseased part—the capillaries, for instance.

It will be no easy task, we presume, for most persons to attach much importance to the position assumed. If it be true, and we are not disposed to question the assumption, that mineral waters are absorbed into the circulation, it will hardly be denied that other medicinal agents may take the same course; and if they are thus absorbed, no good reason can be offered why the same medicinal action may not follow.

We are further told, however, that sensible evacuations, as a general rule, are not desirable; but that the greatest good is derived from the absorption of the water, which produces

an alterative action. Thus, to use the author's very singular language, "it is far better that such waters should *lie quietly upon the system.*" The author further states, that when patients are purged with the *White Sulphur Water*, they usually feel better for a while, but speedily become worse. This temporary amendment is accounted for in the following manner, viz., that the "purgation throws off the gross humors of the body;" but when the remedy "lies upon the system" it is absorbed, and thus produces a permanent alterative action. Verily the author's notions of pathology and therapeutics are but little in advance of those of the ancient fathers.

According to our author, and he is doubtless correct, the White Sulphur Water may, by varying its dose and mode of administration, be made to produce widely different results—to purge, sweat, act upon the kidneys, or *lie quietly on the system.* "Between the action of mercury," he remarks, "and the more powerful of the sulphur waters on the system, the most striking similarity exists." Again:—"while the long continued use of mercury breaks up the strength, that of the sulphur renovates the whole system." Then they are widely different. Our author is exceedingly loose in his reasoning.

The following is the analysis of the White Sulphur Water, as analyzed by Professor W. B. Rogers, of the University of Virginia.

Solid matter procured by evaporation from 100 cubic inches of White Sulphur Water, weighed, after being dried at 212°,

65.54 grains.

Quantity of each solid ingredient in 100 cubic inches, estimated as perfectly free from water.

Sulphate of lime	31.680	grains.
Sulphate of magnesia	8.241	"
Sulphate of soda	4.050	"
Carbonate of lime	1.530	"
Carbonate of magnesia	0.506	"
Chloride of magnesium	0.071	"
Chloride of calcium	0.010	"
Chloride of sodium	0.226	"
Proto-sulphate of iron	0.069	"
Sulphate of alumine	0.012	"
Earthy phosphates	a trace	"
Azotized organic matter blended with a large proportion of sulphur, about	5	"
Iodine, combined with sodium or magnesium.		

Volume of each of the gases in a free state, contained in 100 cubic inches.*

Sulphuretted hydrogen	0.66 to 1.30 cub. inches.
Nitrogen - -	1.88
Oxygen - -	0.19
Carbonic acid - -	3.67

Effects of the water on the system, are thus set forth:—

"*The sensible medicinal effects* of the water are prominently displayed in its action upon the *bowels, liver, kidneys* and *skin*, and when drank fresh at the fountain, by a lively *stimulant* effect upon the system in general, and upon the *brain* in particular.

"Proper quantities, taken in the morning before breakfast, will rarely fail to exert some *cathartic* effect in the course of the day. The liver is, in most instances, brought under its influences, from a few days perseverance in the use of it, as will be manifest from the character of the excretions. Its action upon the *kidneys* is readily induced, and we not unfrequently see it exerting, at same time, both a diuretic and cathartic operation. Occasionally the exhalent vessels of the skin are stimulated to increased *perspiration;* but its effects upon the surface, manifested not only by increased, but *sulphurous perspiration*, do not often occur until it has been freely used for several weeks, nor until the secretory system generally has been brought under its influence."

The particular diseases to which the author believes the water to be applicable are these: Dyspepsia, gastralgia, pyrosis, diseases of the liver and spleen, mucous diarrhœa, piles, calculus affections (palliative), chronic inflammation of the kidneys, bladder and urethra, diabetes, chronic affections of the brain, (water deprived of its gas,) sympathetic irritation of the lungs, chronic diseases of the skin, rheumatism, gout, dropsey, (particularly such as depend upon glandular obstruction,) and, finally *mercurial disease!* This last, the author should have omitted, especially as "Between the action of mercury and the more powerful of the sulphur waters on the organic system, the most striking similarity exists" (p. 57.) In chronic inflammation of the bowels, and in consumption, the author admits the water to be inefficacious.

The following extract embodies the author's views in relation to the effects of the gaseous and solid constituents:

"It is sufficient for our purpose at present, to state, that

* 100 cubic inches amounts to about 3 1-2 pints.

while we freely admit that the *sulphuretted hydrogen gas*, which abounds in the water, is an active *nervine stimulant*, and therefore may be a most potent agent in some cases, we are fully impressed with the belief that either in its *direct* or *indirect* effects, we must look *mainly* to the *solid contents* of the water for its *alterative* power as well as for its activity manifested in its operations through the different emunctories of the human body."

The gas is regarded as decidedly stimulating, and therefore injurious in acute affections.

The author adverts, also, to the *secondary* formation of sulphuretted hydrogen gas. This is supposed by Mr. Augustus A. Hays, to arise from the action of a *peculiar* organic substance, found in the water, on the earthy sulphates. Whatever may be the explanation, the author asserts it as an undoubted fact which has been repeatedly observed, that after the gas has been entirely dissipated, and the water carefully corked in bottles, the sulphuretted hydrogen has been regenerated in large quantities.

The remainder of the book is made up of a review of a book by Mr. William Burke, Proprietor of the Red Sulphur Springs; but as this is very largely a war crimination and recrimination between the parties, we shall carefully avoid it.

Finally, we find several interesting facts mentioned in Dr. Moorman's book; but, upon the whole, we are constrained to say, that its details are generally vague and unsatisfactory, and not such as can be of any material interest to the profession. It appears, indeed, more like an advertisement addressed to the *public*, than a scientific treatise designed for the profession.

ART. VI.—*Proceedings of the Ohio Medical Convention, held at Columbus, on the 18th of May*, 1847. *Columbus.* S. Medary. 1847. pp. 59.

We have not hitherto noticed the proceedings of this Convention, for the very good reason, that a copy did not reach us; and at this late period, an extended notice would be out of place, for doubtless those interested in its proceedings have already become familiar with them.

The meeting appears to have been one of more than ordi-

nary interest; and the published proceedings show that many valuable papers were read.

Among the proceedings we notice the following:—resolutions recommending the views and opinions expressed by the National Medical Convention;—the appointment of a committee of fifteen to prepare a Memorial, to be laid before the Legislature at its next session, praying for the enactment of laws regulating the practice of medicine and surgery.

Accompanying the proceedings of the *Convention*, is a slip announcing the formation of a State Medical Society. The *Convention* holds its next meeting in Columbus, on the 3d Tuesday of May, 1848; the *Society* adjourned to meet on the 2d Tuesday in January, 1848.

ART. VII.—*Constitution, By-Laws and Proceedings of the Medical Association of Adams, Brown and Clermont Counties, Ohio.* Arranged by the Committee of publication. Cincinnati, pp. 22.

The *first* meeting of this Association took place in Georgetown, on the 21st of January, 1847; the *second*, on the 5th of May following, at the same place; and the *third* will take place in Batavia, on the first Wednesday in November next.

The pamphlet before us contains the minutes of the three meetings, together with an address by the President, Dr. Buckner, Constitution, By-Laws, Code of Medical Ethics, and a table of fees.

The following are the officers of the Association: P. J. Buckner, *President;* T. B. Wylie, *Recording Secretary;* H. M. Clark, *Corresponding Secretery;* T. J. Mullen, *Treasurer and Librarian;* J. G. Rogers, S. Y. Thornton, A. G. Lewis, A. Baker, T. M. Tweed, A. B. Haterick, *Censors;* John Thompson, H. McCasky, T. J. Fee, *Committee of Publication.*

The Association has made an admirable beginning; and the character of those engaged in the highly commendable enterprise, leaves no room to doubt its complete success. We would commend the example to the profession throughout the state.

ART. VIII.—*Wood's Quarterly Retrospect of American and Foreign Practical Medicine and Surgery.* April to July, 1847. Vol. I. No. 1. New York; Richard and George S. Wood. 8vo. pp. 64.

This is the title of a new Medical periodical, recently issued in the city of New York. The object which the publishers seem to have in view is a good one; and if properly carried out will doubtless succeed. It partakes of the character of "Braithwaite's Retrospect," and "Ranking's Half Yearly Abstract;" but is designed to embody a fuller view of American Medicine. We regret that the editor's name is not announced; readers in the United States are fond of knowing to whom they are indebted for the knowledge they receive.

We desire to make two suggestions connected with this periodical. The first is, that if the editor or publishers desire to present a *fair* view of American Medicine, they should not take *one third* of the articles from a single periodical; the second suggestion is, that the price, comparatively, is not so low as the publishers intimate; it is about equal to other American periodicals. Sixty-four pages, quarterly, are offered at one dollar per annum.

ART. IX.—*A Practical Treatise on the Diseases of Children.* By D. F. Condie, M. D., 2d Edition. Philadelphia: Lea & Blanchard. 1847. 8vo. pp. 657.

This work contains a full and accurate account of the various diseases to which infancy and childhood are liable. The author is eminently a diligent student, and doubtless a successful practitioner. His researches appear to have been both extensive and profound; and we have no hesitation in recommending this treatise, both to students and physicians, as one of the best upon the diseases of children in the English language. It can be procured of C. Marshall, Lexington.

PART III.

AMERICAN SUMMARY.

1. *Treatment of Yellow Fever at Vera Cruz.*—By C. H. Lamb, M. D., U. S. A.—(*N. Y. Jour. Med.*) In a report submitted to the Surgeon General, for the quarter ending June 30th, 1847, Dr. Lamb makes the following remarks in relation to the treatment of *Yellow Fever.*

With some exceptions the disease has been of a mild and tractable character, yielding, if taken in its earlier stage, to the influence of full doses of quinine (15 to 20 grs.) with mercurials, aided by general and local depletion, warm mustard baths, mild purgatives or enemata, iced or acidulated gum-water in small quantities as a drink. The greatest reliance may be placed upon large doses of quinine at the onset and continued in smaller doses (5 to 8 grs.) every 4 or 6 hours during the first thirty-six or forty-eight hours, in arresting the disease; mercurial cathartics coming in as a part of the early treatment, with a view principally of dislodging the contents of the bowels. When this course fails, as it sometimes does, in producing a favorable termination or crisis, the subsequent treatment, a much less active one, consists in the administration of various remedial agents to meet local symptoms as indicated by the prominent features of each individual case; such as the application of dry cups, iced water and vinegar to the head, fomentations of sponging with warm brandy and water, sinapisms, blisters, mustard pediluvia, together with the internal administration of camphorated ammonia mixture, or where there is much irritability of stomach, bicarb. soda and morphia; at the same time keeping the primæ viæ free by mild enemata.

2. *Treatment of Deafness.*—(*Ibid.*) Dr. Morrell, physician to the New York Institution for the Deaf and Dumb, makes the following observations on the treatment of Deafness.

To cure deafness, two indications present—first, to prevent

ulceration; second, to restore the membranes to a healthy secretion.

For the first, alteratives succeed; and for the second, alteratives are preferable.

Syrup of sarsaparilla, made after the old formula, to which may advantageously be added the root of rumex crispus and the tinctures of the bark of prinos verticillatus and chymaphilla umbellata, is a remedy of the first importance. Next, the muriate of lime, an old remedy, now much neglected, and lastly, iodine and its preparations, make up the chapter of internal remedies. Blisters, kept perpetually discharging, placed behind the ears or arms alternately, form the remedies to be applied externally. The fauces must be well rubbed with a smooth piece of alum twice a week, to be occasionally alternated with a solution of nitrate of silver, or, when the tonsils are prominent, with the solid caustic, not too heavily applied. Lastly, the external meatus must be cleansed once a day with warm brandy, or warm brandy and water, or a solution of iodine, or a decoction of the bark of prinos verticillatus. Perseverance in the course for months, sometimes for more than a year, finally ends with complete success, provided the treatment have commenced before disorganization of the external or internal ear, and this admits of illustration by cases in detail.

---

3. *Sulphate of Quinine in Traumatic Tetanus.*—(*Ibid.*) Dr. Bishop of Ithica, N. Y., reports a case of Tetanus, in which the following course, persevered in for six days, accomplished a cure. The *quinine* was regarded as the main agent.

August 10th, 1845. Called to see Joseph P., blacksmith, aged 32. July 22d, ran a rusty nail into hollow of foot wounding internal plantar collateral nerve of great toe. Wound progressed very unfavorably. On evening of 10th found him with symptoms of confirmed tetanus, viz. opisthotonos, paroxysms occurring every 3 or 4 minutes, pain agonizing, perspiration very profuse, difficult deglutition, pulse 84, can separate jaw half an inch, respiration hurried. I incised the wound, and applied actual cautery. Ordered.

℞. Calomel, Ext. col. comp., aa. gr. v. Ol. croton, mj.
Ft. pill. ij. st. sumend.

℞. Sulph. quinine gr. xv. Sulph. morph. 3-4 gr. Syr. simp. q. s.
To be taken some two hours after the pills.

To rub the following liniment along whole length of spine:
Sulph. acid, 1 oz., Ol. oliv. 2 oz.

4. *Efficacy of Ox-gall in removing impacted Fæces.*—(*Ibid.*) Dr. VANDERPOOL, of N. Y., treated a patient who had resisted other remedies, in the following manner.

Diagnosis, distended cœcum and ascending to the transverse colon, with incipient ulceration of the mucous membrane at this part.

℞. Fel. bov. inspissat. gr. iv. ft. in pil. No. 1.

℩ Give two pills three times a day, and enemata of diluted beef's gall to the amount of two quarts night and morning; broth and farinaceous drinks. The first enema extended to the part affected and produced a quantity of scybalous fæcal matter, such as he had not been accustomed to see, with some mucus. Some alleviation of his distressed feelings followed this evacuation. The enema was repeated the next morning and evening with the effect of an increased quantity of old fæcal matter and less pain afterward in the iliac region. Considerable exhaustion following the morning enema, it was thought better to omit it in future, and give two pills four times a day at regular intervals, and use the injection at bed time. This course was pursued for ten or twelve days, resulting with a voluntary fæcal evacuation in the morning, which had the appearance of long impaction, and a quantity of the same in the evening, believed by the patient to have been by him two years. The abdominal distress abated as this old fæcal matter passed off, and the mucus daily lessened in quantity. He convalesced steadily, without any other medicine, and was soon discharged cured.

5. *Epilepsy.*—(*South. Med. and Surg. Jour.*) We extract the following paragraph from a letter of the Editor, Prof. Paul F. Eve, dated Paris, Aug., 1847. It is especially interesting on account of the painful relation which the writer sustains to the case. He says: "Of course, one of my first visits was to La Charite, to see and hear the renowned surgeon, M Velpeau. He at once recognized me and welcomed me cordially to Paris, expressing his sympathy for the cause which had brought me here, and offering his services to aid me in any way."

Epilepsy.—You are aware that it is a case of this affection that has brought me here, and which supervened upon premature delivery. I left for the Journal a short article translated from M. Trousseau, containing the wonderful cures he had affected by prolonged warm baths, with a small current of cold water falling at the same time upon the head, in acute

diseases within the cranium. I had come to Paris to consult Professors Velpeau, Rostan and Trousseau, and have already accomplished my object. The latter gentleman, could not, because of previous engagements, meet at the consultation, and therefore made his visit alone. After obtaining a history of the case, which is briefly this—the first attack of convulsions coming on about three weeks after the premature accouchment, then the second about the end of the same interval, with subsequent recurrence varying from four to nine weeks —a permanent pain in the head, which has never yet been entirely relieved—failure of all medication, as nitrate of silver, oxide of silver, arsenic, quinine, valerianate of zinc, hydriodate of potash, active purgation, ptyalism, seton to the neck, issues to the arm and leg, cold effusion to the head, diet, narcotics of various kinds, &c., &c., visit to the Madison Springs, Saratoga Springs, travelling, a sea voyage of thirty days—nothing as yet having interupted the attacks. Prof. Trousseau recommended one medical and one surgical means—the powder of the root or leaves of *belladonna* in small regulated and guarded doses for several months, and *ligatures to the primitive carotids.* He was aware the latter proposition would not be sanctioned by the profession, but he repeatedly said were it his own son affected with epilepsy, he would not hesitate a moment to ligate these arteries. We do not know what this disease is, he remarked, and so profound a change in the nutrition of the brain would be produced by closure of the carotids, that I know no means in this affection more available, or which promises as much as their ligation. Prof. Rostan assumed, in the consultation with Prof. Velpeau, the management of the case, and promised very kindly to write out in full, direction for it. These I shall not get until too late for this mail. The plan, however, agreed upon by them consisted in prolonged sedative baths to the skin, hot pediluvia, with cold stream of water to the head, regulations of the bowels, and the powdered root of belladonna.

There being no hereditary tendency in this case, and no permanent external symptom of disease in the brain, they all think, by great care and perseverance in the treatment, that it will be cured. They consider it a severe one, especially on account of its persistence, now sixteen months; and that it is cephalic, and not now dependent on the uterus.

Each of the above named gentlemen utterly refused any compensation for their services in this case.

I may also obtain the opinions of Drs. Marshal Hall, C. J.

B. Williams, and Watson, of London, in reference to this case.

---

6. *Ship Fever* as it appeared in Philadelphia.—(*Med. Ex.*) —Dr. Turnbull gives the following account of Ship Fever. The doses of quinine are evidently too small to produce any material influence in such grave cases.

The premonitory symptoms are as follows: Slight chill, skin hot and dry, nauseau and in some cases vomiting, muscular pains in the back and limbs, with intense pain in the frontal region, increasing from the first to the sixth day. Tongue of a whitish color over the surface, tip of bright red; pulse averaging from eighty-six to one hundred and twenty, with bowels costive.

These symptoms continue for several days, when the skin becomes of a dusky red, the eyes are injected, tongue covered with a thick yellowish, brown, or black paste; teeth covered with sordes; acute pain over the epigastic region, with skin covered with a petechial eruption coming out from the sixth to the tenth day. Delirium now supervenes, with congestion of the lungs, brain or bronchial tubes, generally accompanied by deafness, with spasmodic twitchings of the muscles, and in some cases dysentery and profuse sweats, not of a critical nature.

These symptoms either increase or diminish towards the thirteenth or fourteenth day, or may terminate in death from the twentieth to the thirtieth day, the liability to relapse being very great in all cases.

I have found the following symptoms favorable when occurring about the fourteenth or twenty-first day: tongue becoming moist, first at edges; slight salivation; pulse fuller and slower, with tongue not tremulous when protruded. Unfavorable symptoms: great muscular debility, decubitus, or gliding down to the bottom of the bed, picking at the clothes or catching at imaginary objects.

Treatment.—In the first stage a gentle aperient of oleum ricini or mild neutral salt. Second stage; to diminish the fever by freely sponging the body with tepid water, with the free use of ice or neutral mixture. Thirdly; to subdue local inflammation by cups or leeches, and by applying cold by means of ice to the head, or blister to the nape of the neck, with small doses of hydrargyrum cum creta and pulvis rhei. Lastly; to give quiniæ sulphas in pills of one grain three times a day, with from f℥iv. to f℥vi. of port wine.

By following the above course of treatment, bearing in mind ventilation and cleanliness, with a simple farinaceous diet, out of twenty-one cases I have lost but two, and regretted much that in both instances there was no opportunity for a post mortem examination.

---

7. *The Mexican Surgeon General's Report.*—The following incident is extracted from the letter of Dr. Van Linder, Surgeon General of Mexico. The scene commences while he is amputating a limb.

I continued attending to the various stages of amputation in the midst of balls and the cry of the enemy, and at last finished an operation which appeared to me to have lasted an age. The serenity and resignation of my companions in this crisis were admirable, and is above description. All remained around the patient, attending to the part of the operation which fell to their share, in the midst of the whistling of balls and the cries of death; and when we rose, looking to Heaven with gratitude for our salvation, as we thought, a new peril came to dismay us. A number of volunteers presented themselves in front of our entry, and seeing our uniform, cried—"Death to the Mexican officers," and presented their guns to our breast. I do not know what sentiment inspired me in the resolution which I took, but I rushed to the muzzle of their rifles—I showed them my hand, dripping with blood, and holding a piece of the mutilated leg, cried—"Respect humanity or a hospital of blood—we are surgeons." My words produced a magic effect. In a instant a officer, whose name I have since learned to be Pion, [Pugh,] stepped between the volunteers and ourselves, raised their guns with his sword, and these men, animated by victory, thirsting to avenge the loss of their General, mortally wounded, as I have since learned, became from that moment our friends, our protectors. While these events were passing in my hut, which will never be erased from my memory, our firing had ceased; the troops in the redoubts, finding themselves cut off from the public road, surrendered or capitulated; those on the slope of the Cerro Gordo retired through the ravines, and the enemy remained master of all our positions and of an immense *materiel.*

The volunters of the enemy commenced bringing in, without distinction, their own and our wounded, and we dressed their wounds according to the dictates of humanity and our instructions. We performed various amputations on some

real giants, which succeeded in gaining their good will to such an extent that they refused us nothing that could be useful to us or our wounded.

Although two of their surgeons had arrived, the body which I have the honor to command had the satisfaction that from their number was chosen one member to assist in some grave cases, even in that of Gen. Shields, who had been traversed by a grape shot.

---

8. *Abolition of the Concours.*—On this subject the New York Annalist remarks:

That the plan never would succeed—nay, that it never could be extensively tried in England or America, we have always believed. It had too decidedly the character of making a show of one's self—partook too largely of what our Gallic friends call "*Coup de Theatre*," to suit the Anglo-Saxon nature. It never did and never could have succeeded with us; yet firmly convinced, as we always have been, of this truth, we are surprised that it should have been so soon abandoned in France. There it was at home—it was French and was for a time a fashion—even a fury; but even there it *did not work well;* and those who acted under it were obliged contrary to the very essence of the Concours, to allow their pre-conceived opinions to influence always, and often to control their vote. Of this practice, the election of Breschet presented a striking instance. At that Concours, a rival candidate left the venerable Breschet quite in the rear—the one making perhaps the most brilliant display of science ever known in Paris—the other barely escaping a dead failure; yet the former was rejected, for he was only Broc—the latter chosen, for he was Breschet. This, we presume, gave the death blow to the Concours, and now it is formally, and, as may fairly be concluded, forever abolished.

---

9. *Doctoring Kings, &c.*—(*Ibid.*)—Doctoring kings and queens is not as easy as to treat peasants and laborers. George IV. was taken ill, and sent for his physician, who advised his being immediately bled. The king said he would send for Mr. Philips. The doctor professed himself able to do it himself. "Ah!" said the king, "that is easier said than done, for Philips tells me that no one can bleed me but himself." The doctor persisted, and the king consented. The arm was stabbed three times and no blood came, and then the king said, "I told you how it would be." Mr. Philips was sent

for, who succeeded immediately; upon which the king turned to his physician and said, "I am glad you did not succeed, for it would have broken Philips' heart if any one had done this for me but himself."—(*B. Cooper's Lect Lond. M. G.*) Apropos to this matter, we find in the History of the Captivity of Napoleon, at St. Helena, the following account of the Empress Marie Louise's case. "Had it not been for me," said he, "she would have lost her life, like the poor Princess Charlotte. Where was her husband? where was her mother? why were they not beside her, as I was beside Marie Louise? She, too, would have died, had I left her to the care of the professional people. She owes her life to my being with her during the whole time of danger; for I shall never forget the moment when the accoucheur, Dubois, came to me, pale with fright and hardly able to articulate, and informed me that a choice must be made between the life of the mother and that of the child. The peril was imminent; there was not a moment to be lost in decision. 'Save the mother,' said I, 'it is her right. Proceed just as you would do in the case of a citizen's wife of the Rue St. Denis.' It is a remarkable fact, that the answer produced an electric effect on Dubois. He recovered his *sang froid*, and calmly explained to me the causes of the danger. In a quarter of an hour afterward, the King of Rome was born; but at first the infant was believed to be dead, he had suffered so much in coming into the world, and it was with much difficulty that the physicians recalled him to life." Napoleon was right! The safety of the mother is paramount to every other consideration. But we do not see the alternative. Forceps, at the most, could only have been used, and though the mother might have suffered from their neglect, the child was not necessarily jeopardized, as the result proved. If they were not, Mons. Dubois should have had a little more patience; but he was attending an Empress!

---

10. *Kreosote in Vomiting.*—The Editor of the *Buffalo Med. Jour.*, recommends the following formula:

℞ Kreosote gtt. viij.
P. Sacch. alb. 3i.
Spt. Lav. Comp. 3ij.
Aquæ Pur. 3vi. f. mixt.

A teaspoonful to be administered directly after each vomiting. For children under two years, one half the quantity.

11. *Hydrometra or Uterine Dropsy.*—(*Boston Med. and Surg. Jour.*)—Dr. Dwight, of Deerfield, Mass., met with a case which revealed the following conditions, *post mortem.*

Autopsy, eight hours after death. Present, Dr. Bealls, of Sunderland. On dividing the integuments, the uterus was found firmly adherent to the parietes of the abdomen, and occupying nearly the whole cavity. It had mounted above the umbilicus, and crowded the intestines into the superior and posterior part of the abdomen. The fundus and its peritoneal covering were partially sphacelated. An incision was made into it, and we removed, as nearly as we could judge, six quarts of darkened brown serum. It was thickened throughout its whole surface, but no morbid deposit was noticed. The *cervix uteri was completely obliterated;* no trace of it could be discovered. The left ovarium was of the normal size, the right considerably hypertrophied. The liver of the natural size; the gall-bladder distended with deep-colored bile; the stomach healthy; the jejunum and ileum in a state of sphacelation.

---

12. *Ricinic Acid.*—(*Ibid.*)—A gentleman with whom we have been conversing, speaks with much enthusiasm of the active cathartic properties of a new article prepared from the common castor oil, under the name of Ricinic Acid, that it would seem the subject should receive immediate attention from the chemists. He mentioned Dr. Tully, of New Haven, Conn., who knew most of the marvellous character of the new purgative, which is said to far exceed, in activity, any thing else in the whole range of the Materia Medica. "A mere drop applied to the tip of the tongue," says Dr. Mitchell, of Portland, Me., "will move the bowels with certainty, and with a rapidity quite unknown before." Should any one, sufficiently acquainted with the subject, favor this Journal with the facts in the case, that physicians may know to whom they are indebted for such a potent drug—the mode of making it, the process of administration, the dose—and, lastly, designate the place where it is to be procured, a special favor will be conferred. Dr. Tully's great attainments in domestic medicine, and indeed in every department of science to which his attention has been directed leads us to hope that there is something in reserve, through his instrumentality, that may be of consequence in regard to the Ricinic Acid.

13. *Pseudo-Doctors.*—(*Buffalo Med. Jour.*)—We copy with great pleasure the following pertinent remarks on the subject of *pseudo-doctors.*

Pseudo-Doctors.—The medical profession suffers not a little from the false assumption, or application of the title of doctorship. It is bad enough, in all conscience, to bear the disgrace inflicted occasionally by some of its legitimate members, and to be obliged to sustain the additional burthen of the misdeeds of those who choose to style themselves *Doctors*, or upon whom the generous and discriminating public chooses to bestow the title, is an imposition of which we may reasonably complain. A short time since, among the newspaper items of the day which circulate over the whole country, it was announced that a certain doctor, somewhere in Michigan, was arrested for the alledged crime of having poisoned his wife. Our esteemed contemporary, the Annalist, in commenting on the circumstance, gave utterance to some eloquent expressions of sorrow that the purity and nobleness of our profession should be sullied by such instances of criminal conduct in any of its members. Happening to be in conversation with one who resided in the neighborhood at the time, we learned that the individual referred to was not a regular physician, but a false pretender. An instance of a similar character has lately occurred in this city. A certain so called Dr. Allin has been committed to jail on the charge of a horrible attempt at crime upon the person of a young girl thirteen years of age. Notice of it will doubtless pass from paper to paper, and it will generally be inferred that the said Dr. Allin belongs to the Medical Fraternity of this city. This, however, is not the fact, his only known claim to the title of *Doctor* consisting in his having opened a shop for vending patent nostrums.

We think that it is but just to the medical profession, that editors of papers in which such notices first make their appearance, take pains to state whether the individuals obnoxious to criminal accusation are regular members of the profession, or belong to the much more numerous class of *pseudo-doctors.*

PART IV.

FOREIGN SUMMARY.

14. *On the Subperiosteal Extraction of Bones.*—By LARGHI, Principal Surgeon of the Hospital of Verceil.—(*Monthly Jour. Med. Science*, from Gazette Medicale de Paris.)—The object of this paper is to point out the many advantages of removing portions of bone, so as to leave the periosteum and the muscles attached to it as entire as possible. A few extracts from the memoir will enable our readers to understand our author's plan. He insists that there is not in general any necessity for removing the periosteum along with the bone on account of its participating in the same disease, and that such cases are readily discerned, while he affirms that hypertrophy or thickening of the periosteum, usually observed in the resection of bones, is not a morbid process, but an effort of nature in the way of remedy. "How, then, ought we to proceed? The end in view being to preserve the periosteum, in order to the production of a new bone, it should be our aim in extracting the solid portion of the bone to injure the membrane as little as possible. For this purpose it should be divided no farther than is necessary for the removal of the bone. The portion of bone to be removed is either short or it is long. If it is short, it is sufficient to make a longitudinal incision parallel to the length of the portion of bone to be extracted, and reaching to its surface—through a muscular interspace, for the sake of preserving the muscles. This incision being made, the two borders of the divided periosteum are to be separated, which is the more easy, as it is already in part separated from the bone by the gelatinous fluid, secreted for this very end, and the membrane is thus to be detached all round the bone. In this manner a passage is made for a band, which, by means of a flexible needle, is brought to encircle the bone. While successive tractions are made on the bone by means of this band, the muscles inserted into the periosteum are thrown into contraction, and act in an opposite direction over the several points of the periosteum, whence a complete separation is effected. If there be any difficulty,

the injection of warm water assists." Our author then proceeds to show that a large piece of bone may be extracted by performing the above process at each extremity, and that it may sometimes be done without any intermediate cutting of the soft parts. On this plan he says he successfully extracted in 1845, the osseous part of the eighth and ninth ribs in one patient, almost the whole of the right humerus in another, a part of the right ilium in a third, the lower part of the ulna in another, and several times the first phalangeal bone of the toe.

---

15. *Prevention of Infection from Wounds in Dissection.*—By Prof. Hargrave, of Dublin.—(*Ibid.*)—Professor Hargrave offers some suggestions for the prevention of infection from wounds in dissection. The following is the most valuable part of his communication:—

"For some years I have been in the habit of treating myself in the following manner, when suffering from such injuries, either by my own inadvertence or the awkwardness of others. I have always recommended it to my pupils whenever I have seen them so injured.

"The treatment applies to the fingers and thumb (the parts most frequently liable to be wounded). Wash them well for a few minutes in cold water, then suck them; immediately after apply a ligature above the cardiac side of the wound with such tightness as will induce decided congestion, which will be indicated by the color of the parts; some blood will also flow from the injured surface, and a certain degree of numbness will follow its application. The ligature is then to be firmly tied and knotted, and allowed to remain on for at least twelve hours; I have kept it on for double that period, and still pursued my professional engagements.

"The physiology of such treatment is explained by the ligature causing a permanent stasis in the fluids of the parts injured on its distal side, and producing a well-marked plethora in them, the greater the amount of it the greater will be the impediment to absorption, admitted by all; yet one pathological observation seems to militate against this statement. The constriction caused by the ligature will also oppose a barrier to the return of the venous and lymphatic fluids into the system, consequently to their being circulated through it, so that the poison is prevented entering into the constitution and destroying it, which will then be eliminated locally from the parts where it was first applied; thus suffer-

ing and pain will be obviated, and life valuable to all will be preserved.

"I have no hesitation in directing the attention of the profession to this simple, and, in my experience, efficacious practice. I would also suggest to those engaged in post-mortem investigations, whether anatomical or pathological, a plan worthy of their adoption preparatory to commencing them, which is to smear or rub into the hands any bland oil; this supplies an additional coating to the epidermal one, and will act as a means of closing any *very minute* and superficial abrasion which might exist, though the individual is not aware of it. Will it also limit the absorbing powers of the skin?"—*Dublin Med. Press.*

---

16. *On Ectropion and a new way of Operating for it.*—(*Ibid.*)—Dr. Blasberg (*Oest. Med. Woch*, No. 36) ascribes the formation of ectropion not to those various causes which are generally considered as apt to produce it, but rather to a peculiar condition of the orbicular muscle. He is inclined to think that the proximate cause of the ectropion consists in a prevailing contractile power in those fibres of the orbicularis which surround those that form the ciliary portion of the muscles. In a man æt. 50, with sarcomatous ectropion, Blasberg found a furrow below the ciliary margin of the lower lid, which became deeper every time the patient closed his eyes forcibly. He made a vertical incision in the lid, and finding some of the fibres of the orbicularis much contracted, he divided them, and cured the ectropion. In another case, he made a horizontal incision, about three-quarters of an inch long, and having exposed the orbicularis, he divided at three different places some of its fibres which were most developed, and which were situated at about a line below the ciliary margin. In a short time the ectropion disappeared.—*Gaz. Med. di Milano.*

---

17. *Hyposthenics in Tubercular Phthisis.*—(*Annales de Therapeutique.*)—It appears that the inclemency of the first months of this year has filled some of the Parisian hospitals with cases of phthisis, most of them in the last stage of exhaustion. We find that out of forty beds in Andral's wards of "La Charite," twelve were occupied a few weeks since by patients laboring under this ruthless malady. What, asks the reporter, does M. Andral do to arrest the progress of this scourge of humanity? Barley-water, Seltzer-water and opium

exhaust his prescriptions, "a titre sans doute de medication morale." On this despair of arresting the progress of phthisis at least in its early stage, M. Rognetta, so well known as a staunch disciple of the Italian school, remarks, "It is forgotten that what kills is not strictly the tubercle, but in fact the visceral reactions which its mechanical effect excites." . . . "It is certain that if we wait before combating the reactions in question, till phthisis has reached that stage when the lung is in a great measure consumed by caverns, congestions, hepatizations, till the heart and great vessels have undergone sensible alterations, it would be chimerical to hope for any favorable result from any means in the power of medicine. But let these reactions be taken at their onset, when they are still but functional, and let them be attacked then not by detraction of blood, for this remedy is insufficient and rarely applicable on other accounts, but at once with hyposthenic cardiaco-vascular remedies, and there will be found in these resources an efficient power of which those can form no conception who obstinately reject all exact notions on the dynamical power of remedies." He goes on to say that if M. Bouillaud, M. Andral, and M. Chomel were asked if they had ever seen phthisis treated by the appropriate administration of sulphate of iron and quinine, tartar emetic, ergot of rye, cantharides and compounds of iodine, they would tell you that all these are incendiary drugs.

---

18. *Grisolle's Opinion of Typhoid-Fever.*— (Medico-Chir. Rev.) "I stated," observes Dr. Grisolle, "in the first edition of this work, that I have myself seen two similar cases, but made the objection that the phenomena noticed were precisely those which occur in Typhoid fever, and that they ought in consequence to be regarded as belonging to another disease, to an affection not as yet defined. I am still of the same opinion. I find amongst my notes a case, which on other grounds is important to solution of the question before us; it is that a man 22 years of age, who in 1835 died in the Hotel Dieu, in the ward of M. Caillard, on the 27th day of continued fever, who had exhibited all the symptoms of severe Typhoid fever, viz. intense headache (unaccompained by epitaxis), vertigo, prostration of strength, absence of sleep, rambling, deafness, delirium, dryness of tongue, sordes of the mouth, diarrhœa, tympanitic distension of the abdomen, sibillant rattle, numerous sudamina (miliary eruption), rose-colored spots, gangrene of the sacrum, penis and scrotum. On dissection,

however, no characteristic lesion, either of the intestinal follicles or mesenteric ganglia was detected, but the spleen was enlarged and of a difluent consistence. This single fact would lead me to believe with Chomel that the intestinal affection is not an indispensable characteristic of Typhus fever, since in some excessively rare cases, it may be absent. Nevertheless, if the follicular affection of the intestines is not constant, in the rigorous sense of the word, we repeat, again employing the expression of M. Chomel, that it is extremely rare for it to be altogether absent, and that there is not a single authentic case on record in which this lesion has existed, unattended by the symptoms of typhoid fever. One circumstance which has greatly contributed to excite doubts as to the importance of the derangement of the Peyerian glands is the assertion of medical men in London, Edinburgh and Dublin, who aver that derangement of the intestinal glands is frequently absent amongst their patients, who, during life, had exhibited symptoms of typhoid fever. But it is now proved by the clinical cases collected in London by our friend Dr. Schattuck of Boston, and analyzed by M. Valleix, as well as by the labors of Drs. Gerhard and Pennock of Philadelphia, that there exist in the United States and in England two febrile disorders, hitherto confounded together under the name of Typhus fever, but which are really distinct, and only resemble each other in their general symptoms. The one affects young subjects, and is the Typhoid fever, such as we see it here (in Paris), the other common to all ages, with the exception of infancy, is Typhus fever. It is a disease distinct from typhoid fever; it is the typhus fever which we shall describe by-and-by.

"It is a question whether the lesion of the intestinal follicles is a primitive affection, as in the case of most inflammations, or consecutive to a general state, like the eruption of smallpox, to which it has been compared. The first supposition has the greatest appearance of probability, when it is remembered that in most cases the abdominal symptoms, diarrhœa and cholic, commence with the disease, which is not generally the case in other febrile affections. We cannot, however, speak with certainty as to the point.

"Does the intestinal affection constitute the sum of disease? This does not seem to be probable, when it is known that there is frequently no proportion between the severity of the symptoms and the extent of the intestinal lesion. We have seen with M. Chomel death occur, although there was but a single patch of glands diseased, while on the other hand, we

often see in persons who have died from accidental causes very extensive lesions, although the symptoms during life had been of moderate severity. There are moreover, in the course of the disease, a number of morbid phenomena which are not explicable on the supposition of the existence of a general cause as yet unknown as to its nature and seat, which is placed by some in the nervous system, but which is more generally supposed to consist in an alteration in the blood, which has not yet been made out. Typhoid fever has sometimes been compared to eruptive fevers, and at others to simple inflammations, but if it have some points of resemblance with these, it has also many of dissimilitude. It is therefore expedient to consider typhoid fever an especial disease, separated from all other affections by several fundamental characteristics."

---

19. *Albuminuria in Pregnant Women.* (*Ibid.*) M. Devillers recently communicated to the Society of Medicine of Paris, the results of the investigations which M. Regnauld and himself have been engaged in making concerning the Albuminuria of Pregnancy. In this condition the affection presents much less distinct and well-defined symptoms, most of which may be readily confounded with those of other diseases of pregnancy. Sometimes no morbid phenomenon manifests itself; and at others, there may be heaviness, headache, general uneasiness, some characteristicless derangements of the digestive organs; but no febrile action belonging to this disease in particular. Lumbar pains are so common in pregnancy, that we are unable to distinguish them either by their seat or nature, from those which are developed during the acute stage of albuminuria. As to the dropsy, sometimes it does not exist, which however is rarely the case; sometimes it is limited to the lower extremities, resembling the simple œdema of pregnant women; and sometimes it is general, and may be mistaken for anasarca dependent on affection of the heart, which during gestation, is frequently increased to a great extent. There remains the albuminous condition of the urine; and notwithstanding what various writers have stated, these inquirers have never been enabled to detect albumen in the urine of the pregnant women who have been presented to their notice under ordinary circumstances. In examples of the disease, the quantity of albumen has been found very variable, increasing sensibly during notable disturbance of the circulation. *e. g.* during the developement of intercurrent fe-

brile affections, the period of accouchment, puerperal diseases, or the approach of death.

The affection which especially presents itself as a frequent and important complication of albuminaria, is eclampsia. Most of the subjects of puerperal convulsion exhibit evident marks of serous infiltration. In some, however, this symptom is absent; but the authors of this memoir have *constantly* found albumen in their urine. Of course all the women exhibiting albumen do not become the subjects of convulsions; and the authors have found these absent eight times in twenty cases; but they believe that more than a mere coincidence exists between the two diseases, founding their opinion upon the fact, that in ordinary albuminuria various cerebral and nervous phenomena are exhibited, and that during pregnancy these last acquire a special development.

Contrary to what is observed in ordinary cases, the albuminuria of pregnancy may terminate in a rapid and complete cure after confinement, however grave the case may have appeared. It may pass into the chronic state, but this is more rare. It predisposes to the same affection in future pregnancies; it may induce abortion, seems to favor the development of puerperal diseases, and at the very least must be considered as a powerful predisposing cause of eclampsia; but of itself, and alone, it does not seem capable of inducing a fatal termination. The prognosis for mother and child is therefore only grave in proportion to the amount of complications. The authors observed 11 deaths in 20 albuminuric women.

Besides the various cadaveric lesions from the complications, the authors almost always found renal lesion of various kinds, and not exclusively such as are described as characteristic of Bright's disease; and they feel much disposed to accord to these organic lesions much less importance than is ordinarily attributed to them, and to regard them rather as the effects than the causes of the disease. Indeed, in pregnant women its causes seem to be different to those generally admitted in ordinary albuminuria.

The researches of the authors have proved to them that blood of women during gestation exhibits a remarkable diminution of albumen, especially in the latter months; a condition which Andral has shown to be favorable to production of dropsies in general, and one which bears the relation of cause to effect in respect to the present disease. The albumen dissolved in the blood is, in the normal state, combined in certain proportions, with a certain number of saline materials

which allow the blood to traverse the canalicules of the breast, to be there submitted to depuration, without the transudation of a single trace of albumen; but if from any general cause, from a disturbed state of the assimilatory powers, the static equilibrium is destroyed the renal parenchyma may become traversed by abnormal elements, and albuminuria induced.

[*Note.*—Would not this remarkable diminution of albumen during gestation throw some light upon the *arrest* of phthisis during pregnancy? By adverting to the general pathology of phthisis, the connection between the two conditions seems highly probable.—*Ed. Lancet.*]

---

20. *Inhalation of Ether in Traumatic Tetanus.*—(Provincial Med. & Surg. Jour.) — By DAVID CHALMERS, Esq., Surgeon to the North Dispensary, Liverpool.—On Friday, the 23d of April, I met Mr. Owen in consultation on a case of tetanus. The patient was a strong, muscular, young man, named ——— Nolan, aged 20, a brickmaker.

Mr. Owen saw first the case on Saturday, the 17th, and found the patient then complaining of stiffness of neck and difficulty of swallowing. A few ounces of blood were taken from his arm at his mother's urgent request, and five grains of calomel, to be followed by a black draught in the morning, prescribed.

On Monday, the 19th, he was reported by his mother as nearly well; but on Wednesday, the 21st, Mr. Owen was again sent for at 11 o'clock at night, and found him laboring under all the well-marked symptoms of tetanus. Pulse 110; abdomen very hard. Sixty drops of laudanum were prescribed, and fifty drops more to be given during the night. On Thursday, 8 A. M. Mr. Owen found him better, he had slept well during the night; the spasms were not so severe; perspiration profuse; limbs rigid; pulse 98. He was offered forty drops of laudanum. At 6 P. M. he was still easier; the perspiration and countenance natural; bowels open; motion dark and offensive. Fifty drops of laudanum were directed.

Friday, 23d, 11 o'clock A. M. (the first time I saw him.) Complains of having had a very bad night; severe trismus; difficulty of swallowing; violent spasms of the muscles of the neck, chest, abdomen and limbs, with constipation and profuse perspirations; head much drawn back; great toes strongly drawn towards the soles of the feet; body very rigid, and spasms occuring about every half minute; pulse 105. He states that about six weeks since, as nearly as

he can recollect, in raising some bars of iron, he injured the last phalanx of the middle finger of the right hand. The wound is now all but healed. Nail loose, so that in handling it it came away in my hand.

℞. Calomel, Pil. Opii. utrq., gr. j. Fiat pilula omni hora sumenda.

3 P. M. Expresses himself as easier; has had some sleep. We administered the sulphuric æther for three or four minutes at a time, repeating it at short intervals. Under its influence the patient became quiet and tranquil; breathing natural, with diminution both in frequency and strength of spasms, and with a disposition to sleep. Continue the pills.

6 P. M. Has slept ever since. and the spasms nearly as frequent, still they do not entirely rouse him. Perspirations still profuse; æther repeated with the same effect. Continue the pills.

9 P. M. The same. We repeated the æther with the effects of reducing the tension of the muscles generally, those of the chest and abdomen especially. Marked diminution of strength and frequency of spasms; perspiration not so profuse; pulse 104 reduced by æthe ther to 98, this was probably owing altogether to the relief from the spasms; bowels constipated.

℞. Ol. Ricini, et Ol. Terebenth, utrq. oz. j. in forma enematis. Pills every second hour.

24th, 9 A. M. A tolerable night; spasms still frequent but not severe; muscles of chest less affected than those of the abdomen or limbs. Repeat the æther. Bowels not moved.

℞. Ol. Ricini, oz. j.; Ol. Tiglii, gtt. j. M. Sumat statim.

12th. M. Repeated the æther.

3 P. M. Æther repeated, bowels still constipated. ℞. Extr. Colocynth, Co. gr. iv.; Ol. Tiglii, gtt. j. M. in forma pilulæ; sumat j. quaque secunda hora.

9 P. M. Bowels freely opened after taking those pills; has had during the day much greater hardness and spasm of the abdomen, but is now altogether much relieved. Repeated the æther, and ordered cacoa and milk; hot gin and water freely. Contine the Pills every second hour.

25th, 9 A. M. Spasms in abdomen and lower limbs very severe, forcing flatulence from the bowels with great noise; upper half of the body as before. Has eaten a bit of mutton chop. Repeated the æther.

9 A. M. Spasm has been more severe to-day in the abdomen, but not so frequent. Repeated the æther.

26th. Going on favorably and from this day till the 4th of May, had the æther three times daily, and once daily till the 17th. Pills given every fourth hour. On the 26th æther discontinued. On the 8th of May began to walk, and on the 9th got down stairs. He is now able for work.

Owing to the carelessness on the part of the patient's friends, he did not get so many pills as ordered; he had, however, about thirty, and his teeth were not affected.

The foregoing case differs from all other cases that I had met with, in having so many days threatened before it made its real attack. The severity of the spasms, by being less marked on the chest than on the other parts of the body, afforded a better opportunity for the administration of the æther, at the same time that the congestion of the lungs and head consequent on violent spasms of the chest was in great measure prevented. The marked influence of the æther on the spasms in their worst state, and the still more marked influence on the great rigidity of the muscles in the chronic state, proved to be an agent of great power in spasmodic action of the muscles. Even three weeks after the invasion of the disease, the legs and thighs were so rigid as to require the exertion of all my power, added to the patient's own exertion, to flex them on the abdomen, but after having had the æther he flexed and extended them himself with facility.

In using the æther at first I was careful not to give it him in its strongest state, owing to its great effect on the already excited muscles of the throat, but afterwards he had it as strong as we could give it him, using hot water to increase the evaporation, and exhausting from one and a half to two ounces of the strongest æther at each administration. The spasms were always allayed by it, increasing during the interval, making him long for our re-visiting him; his only cry was that we did not give him enough of it.

This case, and one reported formerly from the North-Dispensary, seem to me to be as convincing proofs of the efficacy of æther as any that have appeared.

The case I allude to was the reduction of a dislocation of the femur into the ischiatic notch, of five weeks' duration, less two days, and the patient a powerful navigator, forty years of age. Two sets of pullies were applied to him with different fastenings to the thigh; the strain was kept up by one set, but the other set was also kept up so nearly to the same strain, that on the slightest slip of the principal pullies, the the second set took their place. The strain was kept for one

hour and a half, and during the whole of the time he was under the influence of the æther. It was about six weeks afterwards before he could walk freely.

---

21. *Ipecacuanha in the bites of venomous Animals.— Ibid. by* HENRY COLLET, Esq.—Some years since the daughter of ——— Templer, Esq. about eight years old, had her hand upon the companion ladder of the East India ship, *Malcolm*, when she suddenly felt it bitten by something which was not observed, but the two specks on her finger plainly showed the marks of a centipede's fangs, of which many of very considerable size had been caught. As surgeon of the ship I was called to her assistance, and found her in very great suffering, and after exhausting all the remedies usually considered useful,—oil, spirit, laudanum, ammonia, &c.,—I recollected having being informed by an old officer in a previous voyage, that the best cure for the bite of a rattelsnake was ipecacuanha. I fetched a bottle of wine of pecacuanha from the chest, and gave it to the mother to apply locally, at the same time telling her that I had not the slightest faith in the remedy; but to my surprise and delight she came out of her cabin in two minutes, to tell me it had stopped the pain instantly. I requested her to re-apply if necessary. The pain returned once when it again immediately and entirely relieved it. If so minute a quantity as is contained in the wine, could be attented with such good effects, I think much more might be expected from its use in the concentrated form of emetine.

---

22. *Treatment of Erysipelas by linear Blisters.*—(*Ibid.*)—Erysipelas is not a severe disease when it is confined to a limited part of the body; it is generally its extension, either superficially or in depth that produces the danger. Attempts have been made to counteract this tendency to extension, by the nitrate of silver, solutions of sulphate of iron, &c. These methods have for the most part failed. M. Piorry affirms that he has discovered a means of effecting the desired limitation of inflammatory action with great certainty, by applying at the commencement of the disease, narrow blisters around the entire circumference of the inflamed skin, at a distance of an inch or two from its border. He states that the erysipelatous blush soon reaches the inflammation arising from the blister, but in more than twenty cases has not gone beyond it.

23. *Treatment of Ganglion.*—(*Ibid.*)—Mr. Skey recommends puncture with the point of a small lancet as a less painful and more certain remedy than a blow in the treatment of these affections. The puncture may be sufficiently large only to allow the contents to be pressed through. A pad of lint, bound down with adhesive plaster firmly applied, will almost invariably destroy the cavity in twenty-four hours.

A case occurred in the early part of the summer, which may serve to remind us that even these cutaneous cysts will not bear rough treatment. The cyst, which was rather unusually large, occupied the back of the wrist in a youth of eighteen. Mr. Skey punctured it several times, but it returned. He then passed through it a very fine thread, but being unfortunately, absent from the hospital on the day of his next visit, the thread remained for a few days beyond the usual period. Inflammation followed, of a severe kind, and the youth became an inmate of the hospital for some weeks, where, having recovered from the attack of inflammation, he returned to the out-patient room with his original malady.—*Medical Gazette.*

---

24. *Dysmenorrhœa.*—By Dr. Wells.—(*Ibid.*)—From an affection of the ovary, to the disorders of menstruation, the transition is very slight, I shall therefore venture now to give a short abstract of a paper which was read by your reporter on the same evening, on "*Dysmenorrhœa occurring in Married Women.*

Your reporter considered that writers on the diseases of women did not make a sufficient distinction between the disorders of menstruation, as they occurred in the married, and in the virgin state. In the latter, dysmenorrhœa is generally accompanied by a scanty discharge of the menstrual fluid throughout the whole period, or else, as the discharge becomes more free, the pain goes off, and then it evidently ceases to be a case of dysmenorrhœa. Subsequently to marriage, however, his experience led him to infer, that painful menstruation had nothing to do with the amount of the catamenial flux. Although the pain generally commences before the flow is established, yet the discharge comes on sufficiently copious, and continues so throughout the whole period without alleviation to the suffering. There is also considerable difference in the character of the pain, which in the virgin is chiefly referred to the lower part of the abdomen; while in the married woman it is referred to the back. With

respect to the pathology of dysmenorrhœa in married life, he considers that it is generally dependent upon engorgement of the cervix uteri; and that, therefore, the rational mode of relieving it is by leeches to the uterine neck, or by the application of nitrate of silver in the solid state, or in a saturated solution to the same part during the intervals of the monthly periods.

---

25. *Treacle in Burns.*—By Dr. Payne.—(*Ibid.*)—For upwards of twenty years I have adopted the above mode of treatment in burns and scalds. In all such cases which come under my notice, I order the treacle to be applied pure on the injured surface, and at the natural temperature; folds of well-aired linen being laid over it, and the dressing allowed to remain for two or three hours at first, when the treacle will be found in a more fluid state, hot to the touch, and the rag saturated with it. The treacle is then applied in the same manner, but after the second or third day of the burn, will not require renewing oftener than once or twice daily, and the treacle will now begin to preserve its usual consistence while in contact with the burnt or scalded surface. The time occupied in healing the burn is very much less than is the case when any other means are employed. On the whole I know of no remedy capable of exerting more beneficial effects in burns and scalds, however severe, than treacle; and I am fully persuaded that life might be saved in the most desperate cases by the timely and free application of this invaluable remedy. It acts by effectually excluding the air, and (as appears by the fact of the pain entirely abating, or greatly diminishing, as soon as it is applied,) by abstracting the morbid heat from the part, and thus proving at once sedative, refrigerant, and healing.

---

26. *Arsenic in Cancerous Diseases.*—(*Ibid.*)—Mr. Hunt, of Herne Bay, requested to call the attention of the meeting to the control which the internal exhibition of arsenic appeared to exercise over cancerous diseases. He had seen some well-marked cases recover under this treatment, and believed that the medicine, if systematically administered, would check the disease in every stage. He requested that the members present, most of whom probably had hopeless cases of cancer under their charge, would try the remedy, and report the results at future meetings. The form used by Mr. Hunt was the Liquor Potassæ Arsenitis of the Pharmacopœia, of which

the dose was five minims thrice a day, on a full stomach,—the dose to be reduced on the supervention of conjunctivitis.

27. *Relative Value of different Medicines in Syphilis.—(Ibid.)*—A long memoir on this subject by MM. Boys de Loury and Costilhes closes with the following propositions:—

1. The preparations of gold and silver are worthless in constitutional syphilis.

2. The iodide of potassium has no influence upon the progress and duration of chancre, particularly the indurated variety; but in such cases mercury is to be preferred. The same may be said as respects buboes, mucous tubercles, papular and pastular syphilides.

On the other hand, the iodide of potassium is invaluable in syphilitic diseases of bones, and in syphilitic tubercles of the skin with or without ulceration. It may be stated in general terms that the iodide is successful in proportion to the anterior duration of the disease, and the degeneration of the constitutional powers.

Iodide of potassium acts like a charm in nocturnal pains. United with the bin-iodide of mercury, it is valuable in syphilitic cachexia, and in cases which have resisted ordinary mercurial treatment.

3. Mercurial fumigations are only available in healing local symptoms, and should not be employed as a means of affecting the system.

4. Mercurial frictions should be used only in those cases in which irritability of the mucous membranes forbids the internal administration of mercury.

5. The proto-iodide of mercury is the best medicine which can be employed as an antisyphilitic, as well in the primary as the consecutive symptoms of the disease.

28. *New method of procuring Insensibility under Operations.—(Dublin Med. Press.)*—Our inventive neighbors, the French, have contrived a new plan of procuring insensibility. M. Ducros is the surgeon who practises the method alluded to, and has communicated the results of his experiments in several letters to the Academy of Sciences. The agent employed is the electro-magnetic current. Individuals who have been subjected to the current have been quite insensible to pricking or pinching at all parts of the body; and teeth have been extracted without their knowledge.

29. *Nitrate of Potash in Purulent Discharges.*—(*London Med. Gaz.*)—Dr. Dick says: This salt always increases chronic purulent discharges from the urethra, often producing these after they had been apparently cured by cubebs, copaiba, &c. I have also repeatedly observed the neutral salts induce affections of the substance of the lungs; so that I consider the administration of saline purgatives, to persons disposed to tubercles, as highly dangerous. Where tubercles are dormant a course of saline purgatives will, in a short time, convert them into vomicæ, and cause abscesses.

---

30. *Secretion of Tears in Infants.*—(*Ibid.*)—It is a curious fact, which is yet unexplained, that very young infants never shed tears when they cry. When once this secretion is established, it may cease during the course of a disease; and children then cry without shedding any tears. Trousseau regards this circumstance, when it occurs, as one of bad omen.—*Ann. de Soc. Med. de Flandre.*

---

31. *Detection of Mercury in the Pus from a Bubo.*—(*Ibid.*)—In order to disperse a bubo a man had been ordered to rub in several ounces of mercurial ointment. Poultices were applied, and when the gland was opened, the pus was collected and analysed. It yielded unequivocal traces of quicksilver.—*Heller's Archiv*, 1847, H. 2, S. 185.

---

32. *Peculiarity of Mercurial Salivation.*—(*Ibid.*)—It has recently observed, that mercurial preparations produce salivation only in those persons who are provided with teeth. In illustration of this, a case has lately come under the notice of M. Berard, in which a woman, having been submitted for some time to mercurial frictions, at length became salivated; but it was remarked that the increased flow of saliva was only manifested in the neighborhood of two stumps of teeth with which her jaw was supplied.—*Ann. de Med. de Flandre.*

---

33. *A pleasant substitute for Epsom Salts as a Purgative.*—(*Ibid.*)—M. Garot recommends the following formula for the preparation of tasteless purgative salts (citrate of magnesia):

Carbonate of magnesia - - -	15 parts
Citric acid - - - -	21 to 22
Aromatic Syrup - - -	60
Water - - - - -	300

The citric acid is separately dissolved and added to the carbonate of magnesia diffused in water.

As thus prepared it is not effervescing; but it is easily rendered so by adding only half the quantity of acid, and reserving the addition of the other half, until the dose is taken. The above proportions in grains would constitute a dose.

Dr. Pereira long since suggested the use of citrate of magnesia in nearly similar proportions. He found that one scruple of crystallized citric acid saturated about fourteen grains of light or heavy carbonate of magnesia.

---

34. *Iodine detected in the Testicles.*—(*Ibid.*)—As a singular example of the diffusion of Iodine through the system by absorption, Landerer mentions a case in which he clearly detected it after death in the testicles of a man who had suffered from sarcocele, and who, for this disease, had been in the habit of using externally and internally, preparations of iodine.—*Heller's Archiv*, 1847, H. 2, S. 185.

---

35. *Depletion in Hydrocephalus.*—(*Ibid*)—With reference to depletion, you must not forget that the disease in which you are about to employ it, although of inflammatory nature, is inflammation in a scrofulous subject, and is in many cases grafted on previous organic disease; such as those tubercular deposits in the membranes of the brain, which I have already described to you. You cannot, therefore, hope to cut short the affection by a large bleeding, but your object must be to take blood enough to relieve the congested brain, and no more than is necessary for that purpose. Avoid precipitancy in what you do, and do not let your apprehensions betray you into that over-activity which is sometimes more fatal to a patient than his disease. If you feel any doubt as to the necessity for depletion, visit your patient again before determining on it, but do not delay that visit long. Order a dose of calomel, to be followed by some sulphate of magnesia, if, as is most probable, the bowels be confined, and return again in three or four hours. You may then find that the bowels have acted, and the sickness has ceased; that the head is cooler, and aches less, and that depletion is, for the present at any rate, unnecessary. Or the child's state may be the same, and you may still feel uncertain as to the right course. In that case, at once obtain the assistance of some other practitioner: this is the season when advice may be really useful, for it is only at the outset of the disease that its cure is possible; when

convulsions have occurred, or coma is coming on, your treatment matters comparatively little, for the season of hope and the opportunity for action have then fled.

Though you may have determined on the propriety of depletion, it will be seldom found, even at the outset of the disease, that the character of the pulse is such as to warrant venesection. Local bleeding will generally answer every purpose, and the age and docility of the patient will determine whether it shall be performed by cupping or by the application of leeches. The former is more effective, and, from its shorter duration, often occasions less excitement and anoyance than the latter. In children who are very unmanageable, however, or in very young children or infants, the employment of leeches is always preferable. They should be applied to the vertex; because if put on the temple they hang down over the eyes and terrify the child; if behind the ears, they are very likely to be rubbed off as it rolls its head from side to side. I will not say that this depletion is never to be repeated, but I believe that in by far the greater number of cases, you will do no good whatever by its repetition, and the exceptional cases will generally be those in which, very marked relief having followed the first bleeding, the same symptoms of congestion of the brain appear to be returning twenty-four or thirty-six hours afterwards. If you do not see the child until the second stage of the disease is far advanced,—till general convulsions have occurred, or twitchings of the limbs, or of the muscles of the face, an appearance of extreme alarm, or a state of alternate contraction and dilatation of the pupils show them to be impending, you must be exceedingly careful in abstracting blood. Under such circumstances, I have seen convulsions, to all appearance, induced, and the fatal course of the disease accelerated by a rather free, though by no means immoderate, loss of blood.

---

36. *Influence of the Weather upon Health.*—(*Med. Times.*) —Dr. Casper, professor in the University of Berlin, in his essay on this subject, gives the following practical conclusion: In Berlin, while the month of January is the least, December is the most, favorable to health. The greatest number of deaths occur in spring, and the smallest number in summer. Extremes of temperature are dangerous to life. A high barometrical pressure tends to increase, while a low pressure tends to decrease, the rate or mortality. The influence of atmospheric pressure on human life varies in different seasons.

No condition of the air is so dangerous to life as dry cold. On the contrary, humid cold has the greatest tendency to support life. Of all seasons of the year, the winter gives rise to the greatest number of cases of inflammatory diseases, while the spring is most fatal to them, especially to cases of pneumonia. Cold winters, warm springs, summers, and autumns, increase the danger and fatality attendant on inflammation attacking the brain and respiratory organs, and *vice versa*. The maximum mortality from phthisis occurs in spring, and after this season in winter. The minimum mortality in autumn and winter. Variations in the state of the atmosphere appear to exert but little influence upon the relative number of deaths from phthisis. Nervous fever is most frequent and fatal in autumn—least frequent and fatal in spring. The influence of weather and season on health varies with the different periods of life. This influence is most marked in the ages of infancy and puberty, but it is least marked in the first septennial period of existence. From the twentieth year upwards, the winter is the most dangerous, and the summer the most favorable season to life and health; and the older the individual the more striking is this difference.

---

37. *Influence of the periods of the Day upon Births and Deaths.*—(*Ibid.*)—Dr. Casper has arrived at the following conclusions:—The greatest number of births occur between nine o'clock in the evening and six in the morning, while the smallest number occur between nine o'clock in the morning and six in the evening. The pains of labor commence most frequently between twelve o'clock at night and three in the morning; least frequently from six to nine in the morning. The influence of light is more marked with respect to the commencement of labor-pains than with respect to complete delivery. Amongst those births in which the pains commenced by day, the greater number were male children, and *vice versa*. On an average, the delivery was more protracted when the pains commenced by day than by night. The preponderance of nocturnal over diurnal births is more striking in respect to children born dead, than in respect to those born living. The maximum mortality occurs in the hours before noon, and the minimum mortality in the hours before midnight. Individually regarded, the ratio of deaths from inflammations, phthisis, and pulmonary hemorrhage, is greater in the afternoon; from fevers and exanthemata, just before mid-

night; from cerebral apoplexy, during the day; and from diseases of the nervous system in general, the hours which immediately follow midnight.

38. *Treatment of Cancer.*—(*Ibid.*)—M. Rivaille read a paper on the use of caustics for the treatment of cancer. In a general manner Dr. Rivaille stated that caustics were preferable to the removal of these tumors with the knife. Concentrated nitric acid had yielded him in his practice most advantageous results. Poured over a pledget of lint, it constituted with the latter a semi-solid cake, which moulded itself to the shape of subjacent parts, and effectually prevented hemorrhage. It was particularly in fungous tumors disposed to this accident that M. Rivaille had found nitric acid useful as a local application. M. Rivaille also in many instances employed alum for the purpose of arresting the progress of hospital gangrene.

39. *Lithotrity.—Adjourned Debate.*—(*Ibid.*)—M. Civiale read the second part of a paper, the commencement of which we forwarded to the readers of the *Medical Times* in our Parisian correspondence of July 17. M. Civiale stated that Souberbielle had obtained 28 cures out of 39 cases of lithotomy; of 100 patients operated at the Hotel Dieu, 56 only were cured; out of 65 operated at La Charite, 35 died; and of 73 patients on whom lithotomy was performed, from 1836 to 1842, in the hospitals, 25 patients died and 47 were cured: statistical results from which it followed, that the proportion of deaths from lithotomy amounted to more than the third part of the persons operated upon. M. Civiale concluded:—1st. That lithotrity, when properly performed, saved 96 or 98 per cent. of the patients. 2d. That, when lithotomy was exclusively employed, the mortality was equal to 30 per cent. When applied to children alone, cystotomy was successful in nine cases out of ten; but when applied to adults or to the aged, 50 to 75 per cent. only were benefitted.

40. *Alkaline Urine in Health.*—(*Ibid.*)—Dr. Adolph Krukenberg, of Brunswick, quoted in the *Monthly Journal*, says that the fact, first promulgated by Wohler, that the internal use of salts, of vegetable acids, and fruits containing them causes the urine to be secreted alkaline, has been too much neglected by succeeding physiologists and pathologists. Dr. Krukenberg found that a much smaller quantity of fruit was

necessary for the production of this phenomenon that has hitherto been supposed, namely, two to four ounces of apple pulp, or twelve plums weighing without the stones, scarcely one ounce and a half, sufficed to make the urine alkaline and hazy from phosphates, or, if clear on secretion, heat caused their deposition; the addition of a little hydrochloric acid caused an effervescence like champagne. Too much liquid, a bladder already filled with acid urine, or a disproportionate allowance of flesh, interfered with the success of the experiment. In the simple chronic nephritis of Rayer, the chief symptom is the alkalinity of the urine; and some of the cases recovered so quickly as to justify a doubt as to the correctness of the diagnosis; although he inculcates careful dietetic treatment, it is evident that the semieotic influence of fruit in small quantities was unknown to him. In several of his cases the alkalinity of the urine seemed to depend on purulent admixture and consequent rapid putrefaction; and once it seemed to be kept up, if not produced, by the use of an alkaline saline water. The alkalinity of the urine has also been used by Prout as a diagnostic sign of certain spinal affections; these he divides into two great classes:—1. Those arising from depressing emotions and weakening influences; and in these he recommends the use of fruits, and fluids containing malic acid as cider and perry; to these, and not to any disease, Dr. Krukenberg refers the alkalinity of the urine. 2. Injuries of the spine; neither Rayer nor Dr. Krukenberg, however, have ever been able to discover the urine alkaline from this accident, unless there were some existing or consecutive affection of the mucous membrane of the urinary passages, producing purulent admixture, hastening thereby the putrefactive changes in the urine. Prout also mentions that although alkaline urine, by copious secretion, be clear and bright, yet boiling causes it to deposit a phosphatic sediment, which falls without any such previous process if the secretion be more sparing; the phosphates separate before the boiling point, and from their great specific gravity fall rapidly, and may thereby as well as by their solidity in acids, be distinguished from the albumen found in Bright's disease.

---

41. *Case of Poisoning with Arsenic.*—[The details of the following case will doubtless create surprise in the minds of many. The poison was taken on Wednesday, and at 10 o'clock at night the vomiting commenced. On Thursday morning M. Louis saw him, but did not recognize the symp-

toms of poisoning. On Friday, Andral was called in, but he also failed to detect symptoms of poisoning. On Saturday evening, *three days after the poison had been taken*, the symptoms were for the first time recognized; and on Sunday morning M. Chevalier detected Arsenic. Truely the Parisian *Savans* are not immaculate.—The following is an extract from Chancellor's report to the Court of Peers.—*Lancet.*]

Finding himself overwhelmed by the appearances of a conviction from which he could not escape, he immediately without doubt, adopted the determination to use the poison with which he was provided. He thought, according to all appearance, that the effect would be more prompt than it was. He certainly took the poison in the course of the Wednesday, either a little earlier or a little later, but in such a way that the evacuations which it would produce, considering the dose that he had swallowed, began at ten at night in a way to excite serious attention. The rest of the night and the following day were very bad. The evacuations had ceased at the end of Thursday, but were succeeded by great weakness. A physician of great ability, who had attended him and his family, was sent for, but did not arrive till the morning of Thursday. Notwithstanding the inquiries he entered into, and which appeared to be very serious, he did not recognize the symptoms of poison, but thought he discovered in the patient those of an attack of cholera. He ordered the remedies usually prescribed in such cases. The rest of that day and the following night were past most painfully, but in the morning of Friday his condition seemed to be ameliorated. Having already invested himself with the power conferred by the Royal ordinance rendered the day before, and which had just reached me, I thought myself bound about the middle of Friday to call in Dr. Andral officially to examine most profoundly the state of M. de Praslin. Dr. Andral came immediately to him and examined him with the greatest care, but from the improvement which had taken place he was not able to discover the true cause of the evil. At my desire he went again to the bedside of the patient, and on his return assured me that his removal to the prison of the Luxembourg might be made without inconvenience. It took place, in fact, on Saturday, at five in the morning, and, in the course of the day, I was able to interrogate him in the presence of the peers who had accepted the charge of aiding me in so laborious a task. That examination will be found in the papers before you. Although a complete avowal did not, during the whole

length of it, pass the lips of the accused, the absence of all former denegation, even when the option between a yes and no was formally given him, might well pass for an avowal. This examination could not continue any length of time, the state of weakness into which the accused had fallen did not permit it to be prolonged. He was immediately carried back to his bed, which he did not afterwards quit. The same evening the symptoms became infinitely more grave, and all the appearance of poisoning became more evident. From that time he was treated as was proper in such a case by M. Andral, M. Rouget, the physician of the Luxembourg, and M. Louis, his usual medical attendant, it was the latter who saw him from the Thursday. On Sunday morning I ordered medical experiments to be made on the dejections of the accused of every kind. M. Chevalier, who was charged with the operation, perceived very clearly the presence of arsenic in the matter submitted to him. He also discovered the presence of arsenic in a phial seized by M. de Praslin, whilst still in his hotel, and which probably had contained that which he had taken. Afterwards he ascertained the presence of arsenic in the dejections which remained on an arm chair, where M. de Praslin had been placed on the Thursday on getting out of a bath, and which had been removed to the garden in consequence of the stench proceeding from it.—From Sunday morning, the aggravation of the illness, the alternatives of pain and weakness which it caused, did not permit a new examination of M. de Praslin to be attempted. Only some detached phrases were drawn from him, but it was impossible to subject him to a regular examination, attempted at once, but without success. His death took place on Tuesday, and the autopsy of the body was effected by Messrs. Orfila and Tardieu, in the presence of Drs. Andral, Louis and Roguet. The proceedings and the experiments which were afterwards instituted by Messrs. Orfila and Tardieu, fully confirmed the assertion of M. Chevalier. The conclusions come to, tend to show that the poisoning of M. de Praslin, effected by himself, in the middle of the day, some hours only after the murder had been perpetrated. The *proces verbaux*, which are before you, show that all the incidents which took place afterwards, the intervals which elapsed between them, in fine, the duration of the state which terminated in death, are the natural and usual consequences of this kind of poisoning.

PART V.

NOTICES OF EMPIRICISM.

1. *Empirical Advertisments.*—On a former occasion we adverted to several advertisments in medical periodicals, which, it appeared to us, were derogatory to the dignity, spirit, and interest of the profession. We adverted to this subject for the sole purpose of directing the attention of editors to a point which they seem to have treated with indifference; and although the injurious results may be comparatively trivial, yet the sacrifice of principle is precisely the same.

In the September No. of the *New-York Journal of Medicine*, an advertisment is inserted heralding to the profession the works of *Dr. Beach.* The advertisment contains the following sentence. "Those physicians who are favorable to improvement in the science of medicine, will find it to their interest to purchase these works; they are all conformable to the principles of Eclectism, which now promises to become the most popular of any other system of practice." This *Eclectism*, be it understood, is a new name for naked, unalloyed *botanical* practice.

To illustrate this subject let us suppose that an advertisment is presented setting forth the virtues of Swaim's Panacea, Jayne's Matchless Sanative, Rev. B. Hibbards Pills;—would *such* an advertisment be admitted? And if not, why admit Dr. Beach's? The principles advocated by this author are as greatly at variance with those acknowledged by the regular profession, and just as empirical, as those of Swaim, or Jayne, or Hibbard. And there is no difference in principle between advertising the *book* and the *Medicine.*

We are not ignorant of the fact, that the advertising sheets are controlled by the publishers, and hence we acquit the able editor of the N. Y. Journal of any *direct* agency in sending forth such a notice; still we cannot avoid the conclusion, that if the publishers' attention had been forcibly drawn to the subject, and objections made to its insertion, that they would at once have refused it admission. Every editor should exercise sufficient control over even the advertising portions of his Journal, to be able to prevent the insertion of all such obnoxious advertisements.

We trust that Journalists will turn their attention to this subject, and at once suppress a mischief which seems to be rapidly progressing.

PART VI.

EDITORIAL DEPARTMENT.

Ignorance of a Phrenologist.—A Mr. O. S. Fowler, who publishes a Phrenological Journal in the city of New York, makes the following remarks in relation to the organ of Veneration, and *the seat of the soul:*

"Veneration is also located nearer than any other organ to that "SEAT OF THE SOUL," or grand centre of the nervous system which receives all impressions and issues all edicts. This organ lies directly above this "holy of holies," so that its delightful action may maintain the most perfect inter-relation with the inner temple of the mind. Hence, love and worship of God diffuse throughout the entire brain and nervous system a holy spell, which sanctifies them all, and sheds an indescribable exquisiteness throughout mind and body."

The soul, he is of opinion, is located in the *corpus callosum*. He remarks:

"The SEAT OF THE SOUL is probably in this commissure, and the corpus callosum undoubtedly serves to impart that CONCERT to all the faculties called CONSCIOUSNESS, by which one faculty calls up such of the others as may be required to accomplish the end sought."

The *corpus callosum*, in which this sapient phrenologist locates the soul, is composed of *white* or *fibrous* nervous matter, and consequently it has no function beyond that of merely *conducting* the nervous influence, which is generated in the vesicular or cortical structure. It is therefore obvious, that the corpus callosum, even admitting the truth of phrenology, could not possibly be the seat of a faculty of the mind, much less that of the soul itself. The ignorance, however, of anatomy and physiology manifested in this instance, will create little surprise in the minds of those who have noticed the wild and reckless assertions of this writer.

Effects of Ergot on the Fœtal Heart.—According to the observations of Dr. Hardy, of the Dublin Lying-in Hospital, ergot dimin-

ishes the frequency of the pulsations of the Fœtal heart. The effects generally commence in a half an hour; this diminution in frequency is followed by irregularity, intermission, and finally cessation. If the number of pulsations be reduced below 110, and *irregularity* supervenes, the child is seldom saved, even if delivered at once; without intermission, it may live. These are important facts. They teach the importance of fœtal auscultation, as well as the necessity for caution in the administration of ergot.

Medical Appointments.—The following appointments have been made during the past summer and autumn, in the schools of the United States. It will be seen that an unusual number of changes, growing out of deaths, resignations, &c., have taken place.

University of Pennsylvania.—Professor James B. Rogers, of the Franklin Medical College, Professor of Chemistry, vice Professor Hare, resigned.

College of Physicians and Surgeons of New York City.—Prof. Alonzo Clark, of Pittsfield, Lecturer on Physiology and Pathology.

University of New York.—Professor S. H. Dickson, of the Medical College of South Carolina, Prof. of Theory and Practice, vice Prof. Revere, deceased.

Transylvania University.—Dr. E. L. Dudley, Prof. of General and Pathological Anatomy and Physiology, vice Prof. Lawson, resigned.

Medical College of Ohio.—Professor J. P. Harrison transferred to the chair of Theory and Practice, vice Professor Morehead, resigned. Prof. L. M. Lawson, of Transylvania University, Prof. of Materia Medica and Therapeutics, and General Pathology.

Medical College of South Carolina.—Professor Geddings transferred to the chair of Theory and Practice, vice Prof. Dickson resigned. Dr. John Bellinger, Prof. of Surgery, vice Professor Geddings.

Washington University, Baltimore.—Dr. George McCook, of Ohio, Professor of Surgery, vice Prof. Gibson, resigned.

Hampton Sydney College, of Richmond, Va.—Professor Charles Bell Gibson, of the Washington University, Prof. of Surgery, vice Prof. Warner, deceased.

University of St. Louis.—Dr. T. S. Beyburn, Professor of Materia Medica.

Memphis Medical College.—Dr. Donne, of Louisville, Professor of Anatomy, vice Prof. Bybee, resigned.

The American Medical Almanac.—This is a most valuable publication recently issued by Messrs. Lindsay & Blakiston. It embraces statistical information in regard to the various medical Institutions and Periodicals, in the United States. It supplies a little vacancy in our medical publications, which, we presume, will be duly appreciated by the profession. We must remember, however, that for the purpose of securing another similar issue next year, that the present publication must receive a reasonable share of patronage. Those interested, we trust, will look to this matter.

Adulteration of Medicines.—The cupidity of man is one of his strongest and at the same time most detestable traits of character. It too often leads him to the commission of crime, and that too, while he would persuade himself that he is but acting in accordance with some of the ordinary rules of the commercial world. These various forms of peculation may be silently endured so long as they affect only the purse; but when the nefarious trafic is made to invade the health and lives of men, outraged justice and bleeding humanity cries aloud for redress. No license of trade—no loose principle of commercial ethics can here be tolerated; but every principle of justice, humanity, and religion, demands that those dispensing drugs shall commit no fraud.

It has long been a belief, nay, an established fact, that various forms of medicines were largely adulterated; but it has been reserved for recent investigations to point out definitely and conclusively—to specify and prove—beyond all possibility of doubt, that these contaminations are not only made *occasionally*, but that it has become a *regular, settled and systematic part of the trade!* In proof of this we refer to the article "Adulterations of Medicines" put forth by the N. Y. College of Pharmacy, and which will be copied into the next number of the Lancet. The investigations of the College place the question beyond doubt, that many importers are engaged in the devilish trafic of spurious drugs, and that they are imposed on the retailer as genuine. How far this system of sophisticating pharmaceutical preparations may be indulged in by the druggists of our own country, we have no accurate means of de-

ermining; but there is great room to fear that some, especially eastern wholesale houses, are not entirely free from the crime; but whatever may be the source—foreign or domestic—the result is the same, and the country is stocked with spurious medicine.

Humanity shudders at the awful consequences which attend this hellish fraud. Physicians purchase particular articles of medicine and administer them to their patients; the preparations being spurious, the physician is disappointed in the result, and the patient falls a victim to the rascality of the druggist or manufacturer. A few shillings in one scale, and the patient's life in the other!

Take a few illustrations. Blue Mass is largely adulterated with *blue clay;* some of the specimens analyzed by Mr. Reid, contained no more than 7.5 of mercury, but reached 27.0 of clay. What an astounding result. Blue Mass is one of the most common medicines prescribed by physicians; every one knows that it often fails, and some believe it to be nearly inert; much of this uncertainty arises, no doubt, from the medicine being impure—the patient takes *blue clay* instead of *blue pill.* The article of *quinine*, now so extensively employed, is seldom pure; and it is suggested in the article previously cited, that this accounts for the *large doses* which are often given. It is supposed that the quinine as now used, is at least *one half* salacine; other specimens are adulterated with flour and starch.

It is stated by a circular issued in August last, by the New York College of Pharmacy, that they have obtained information from the agent of an English house, that two classes of articles are manufactured, one for the Atlantic cities, and an inferior one "for the West"—meaning, of course, the Western States, where it is presumed a *cheap* article will "take." The following examples are mentioned: Comp. Ext. Colocynth, 9s. 6d.; do. *for the West,* 5s.; the latter, of course, *adulterated.* Again, Blue pill 3s. 9d.; *for the West*, 1s. 8d.

And thus the fraud goes on. Our transatlantic brethren certainly have more skill than honesty in these matters; they are far in advance of the wooden nutmeg era.

We feel inclined to add, that even the practitioners of medicine —*some* of them—often do themselves and patients great injustice in the selection of medicines. It is a fact not to be denied, that

physicians occasionally select medicines according to the *price*, rather than the *quality*. Thus if one article of rhubarb costs but $1.50 per pound, and another $4, the *cheap* article will frequently be preferred. We are satisfied that much error exists in regard to the selection of medicines; and between the desire to procure cheap articles, and the imposition of adulterated medicines, the physician is often supplied with drugs wholly unfit for administration.

We design to recur to this subject again, and in the mean time, it is to be hoped that physicians and druggists will become thoroughly aroused, and take the necessary steps to correct a system of robbery and murder which is annually slaying its thousands. Those who desire to look farther into this subject, may consult very advantageously the work of Dr. Beck.

THE WESTERN LANCET.

VOL. VI. CINCINNATI, DECEMBER, 1847. Nos. V. & VI.

PART I.

ORIGINAL COMMUNICATIONS.

ART. I.—*Pratical Observations on the nature and care of* FUNGUS CEREBRI.—By P. J. BUCKNER, M. D., of Georgetown, Ohio.—[Read before the Aud. Ass. of Brown, Adams, and Clermont Counties.]

This disease is variously denominated: Hernia cerebri, Fungus cerebri, Encephalocele.

There are two principal kinds of hernia cerebri; one presents itself in young infants, before the ossification of the bones of the cranium is completed; the other takes place after the destruction of a part of a skull by the operation of the trephine, accidental violence or disease. The congenital hernia cerebri of infants occurs, however, in two very different forms; in one, it is covered by the scalp; in the other, the corresponding integuments of the head, and sometimes even the dura mater, are deficient.

We pass by, however, the congenital form of the disease, to notice more particularly, that form of it, which takes place after the operation of the trephine, or accidental violence; which is of much the most frequent ocurrence, and interesting species of the disease to the practitioner. Various examples of this disease are recorded in memoirs of the French academy of surgery. Although the case has attracted considerable notice, modern surgeons are not far from entertaining settled opinions concerning the exact nature of the tumor. And here an important question, and one difficult of solution, naturally presents itself; viz: What causes hernia of the brain?

Etiology.—Baron D. J. Larrey, who had perhaps, a larger experience in injuries of the brain, than any other surgeon in the world, says;—"We have been enabled to observe in many individuals, that the irritation which is concentrated in the part of the brain corresponding to the opening in the cranium, may depend as well on the contact of the external air, as on the presence of foreign bodies. The encephalon, traversed in all directions by innumerable arterial vessels, must undergo a spontaneous expansion, the effects of which become so much the more sensible, as the walls of the cranium do not offer an equal resistence at all parts of its cavity. Thus when a portion of these osseous parieties are suddenly removed, the corresponding part of the brain becomes exuberant, and a mechanical irritation exercised from the exterior towards the interior, this expansion is increased, and *hernia* is immediately produced. The displacement of this exuberance gradually augments, and a tumor of greater or less size is formed on the exterior, exhibiting vital phenomena that are not observed in the healthy state."—*Surgical memoirs of the campaign in Russia, Germany and France.*

Mr. Abernethy explains the formation of the disease as follows: "In consequence of the brain being injured to some depth beneath the surface, disease of the vessels and consequent effusion of the blood had ensued; the effusion was, for a time, restrained by the superincumbent brain and its membranes; but these gradually yielding to the expansive force exerted from within, and at last giving way altogether, the fluid blood oozed out and congealed upon the surface of the tumour. An organized fungus can hardly be produced so rapidly as these tumours are formed."—*Surgical works, on injuries of the head;* vol. ii. p. 53.

On the contrary, Mr. Charles Bell declares, that the swelling is vascular and organized.—*Operative Surgery*, vol. i.

Dr. John Thompson also entertained a different opinion from that of Mr. Abernethy, respecting the mode in which these hernia cerebri are formed. "In a considerable number of those who had the cranium severely contused or fractured by musket balls, (says Dr. Thompson) fungus growths took place through the openings, which had been made at first by the ball, or afterwards by the trepan. These growths, I am inclined to believe, are the consequence of a contusion of the substance of the brain and of the membranes that cover it, which gives rise to the formation of a new organized substance, different in its texture from brain, and are not, as some late

writers would endeavor to persuade us, simply protrusions of the brain, resulting from the removal of the natural covering, which is made to them by the dura mater and cranium."—*Report of observations made in the military hospitals in Belgium*, p. 57–8.

From the investigations of Mr. Stanley, the fact is placed beyond all doubt, that a part of the brain occasionally constitutes the substance of hernia cerebri, and he thus confirms the opinion formerly entertained upon this point by Quesnay and Louis. Thus in the first case which Mr. Stanley has recorded he says, "the whole tumour was sliced off with a scalpel. During the operation the boy gave no manifestion of positive pain, although not unconscious of what we were doing. Considerable hemorrhage took place from the surface of the brain, exposed by the removal of the tumour, the blood being thrown with great force, and to a considerable distance, from numerous vessels, which were attempted to be secured, but ineffectually, by ligatures. After a short time, however, the bleeding ceased. On examination of the part, which had been cut off, its exterior was found to consist merely of a layer of the coagulated blood; the rest of the mass was brain possessing a natural appearance, the distinction between the cortical and medullary matter being readily seen, with the convolutions and pia mater dipping down between them. In the dissection after death, all that part of the dura mater adjacent to the ulcerated aperture, through which the brain had protruded, was black, sloughy and much thickened.

The exposed surface of the brain, from which the portion had been cut off, exhibited a softened and broken down texture; a state of disorganization, which extended deep into its substance. About an ounce of fœtid and dark colored fluid was found between the dura mater and arachnoid membranes. Several small effusions of blood were met with, both between the membranes and in the substance of the brain. The arachnoid membrane was thickened and opaque over each hemisphere. The vessels on the surface and in the substance of the brain were remarkably free from blood. The lateral ventricles were large, and filled with transparent fluid, and there was some found between the membranes at the basis, so that, altogether, the quantity from the two sources was very considerable."—*See Med. Chir. Trans.* vol. viii. p. 15–17.

Thus we see, with regard to the cause of the protrusion, it is a subject very difficult of explanation, because if the origin of the tumour depended simply on the removal of a portion of

the skull, or on any changes of the dimensions of the brain in expiration, the effect would always follow such causes, and prevail in all patients. From the particulars of the dissections, performed by Mr. Abernethy and Mr. Stanley, and those referred to by Dr. Thompson and Baron Larrey, it is clear, that the hernia cerebri is a disease connected with deep seated changes throughout a great part of the brain. The substance of this organ is found more or less pulpy and disorganized; and after death large effusions of serum, and even sometimes of blood and purulent matter, are observed. These appearances leave no doubt of the disease being associated with inflammatory action within the head. It is highly probable, therefore, that hernia cerebri is only produced when these deep-seated changes are conjoined with the removal of bone. Hence, I deemed it an organized vascular tumour of *fungus growth*, and therefore, have selected fungus cerebri as the most appropriated name for the disease.

Prognosis.—It should be observed that large fungus of the brain, is one of the most grevious accidents which accompany wounds of the head; and that individuals, laboring under it, rarely recover. The developement of the fungi, pre-supposes an extreme exaltation of the irritability of the pia mater and cerebral vessels, and an extensive alteration of the encephalon itself. It is difficult, if not impossible, to remedy it, and the means recommended for repressing these growths, instead of being favorable to their return into the cavity of the cranium, only develop the causes of these exuberances All the wounded in whose cases these remedies were employed, have been observed by Baron Larrey to perish, with one exception, in which the tumour was not large, and was treated with the mildest dressings.

Treatment.—What then ought the surgeon to do, in case of *fungus cerebri*, formed through an accidental deficiency in the bones of the cranium? The answer to this inquiry, is by no means satisfactorily settled. Authors differ as much in their views of treatment, as in the cause, and pathology of the disease. Some recommend *caustics* and *escharotics*, while others condemn them as positively injurious. Others again, advise *excision* of the fungus; while another class, rely on *pressure*. Each of these *three* remedies, have been recommended by distinguished surgeons; and each in their turn, have been condemned by men of the highest standing in the profession. Yet the weight of authority, seems to be in favor of their removal by *pressure*.

Baron Larrey says: "Should this tumour be cut off, the same part immediately furnishes a new exuberance, which, if removed, has another formed in its stead. These excisions moreover, cannot be made, without bringing on very serious symptoms followed by death." Upon the use of *pressure*, he says: "Authors have recommended the exercise of pressure on these tumors, and some have proposed for this purpose plates of lead. This method may cause the developement of serious symptoms, similar to the effects produced by the use of alcoholic and astringent liquids, since they all aggravate the irritation, and disturb the vital power of that portion of the brain with which they are in contact. Pressure, exerted on those cerebral productions gives rise to a feeling of pain in the whole circumference of the wound, and if it be continued, the patient experiences nausea, and is subject to pandiculations; the sensitive functions are disturbed, and syncope supervenes."

Richerand affirms, indeed, generally, that when the brain is exposed, in consequence of an injury of the head, the encephalocele should be cut down with the knife, and repressed with gentle pressure.

Sir A. Cooper is also an advocate for pressure, made with adhesive plaster, and a compress of lint, wet with liquor calcis; his aim is to reduce the swelling to a level with the bone, when, he says, the scalp will heal over it. The cases published by Mr. Stanly (in Med. Chir. Trans. vol. viii. p. 36,) are rather favorable to the employment of pressure, "in as much as it appeared evidently to check the protrusion, and was mostly born without inconvenience." In these cases the dura mater must have remained uninjured or lacerated, inasmuch as he adds, "The idea, however, that where the brain protrudes through the dura mater, pressure can effect its return, is quite untenable."

The danger of applying styptics and irritating applications is shown by Hildanus. Mr. Hill, and many more modern surgeons.

Having taken a cursory view of the conflicting opinions of standard authorities on the nature and cure of this fatal malady, I must claim your kind indulgence, while I add my humble testimony in favor of the superior advantage of *pressure*, in the treatment of this disease. My views of the treatment will, perhaps, be best illustrated by the history of a case which occurred in my own practice.

On the 27th of August, 1845, I was called to see the son

of Moses Gould, of this county, a lad of 10 years of age, who had been thrown from a horse at full speed, against the corner of a common rail fence. His head struck the end of the fourth rail from the ground, which, being wedge-shaped, penetrated the right parietal bone just above the squamous suture.

When the accident occurred, my worthy young friend, Dr. W. L. Thompson was sent for, and upon his arrival found the boy laboring under the usual symptoms of fracture of the cranium, with compression of the brain. Upon examination of the wound in the scalp, he discovered along with the coagulated blood there was evidently portions of the brain exuding from the wound. Not being prepared with the necessary instruments for the operation, which he supposed would be required, he sent a messenger immediately for me, requesting my assistance in the case.

When I arrived it was dusk. After a consultation with Dr. Thompson, we proceeded to the examination of the wound. Having shaved the scalp, I made a crucial incision with the wound in the integuments, and dissected up the flaps, when we found a large cavity, or want of bone, in the cranium. After removing the coagulated blood, I used my index finger as a probe, and passing into the wound in the skull, discovered a portion of bone, two inches in length and one and a half in width, irregular and serrated in its margins, severed from its continuity, and thrust into the substance of the middle lobe of the right hemisphere of the brain.

The membranes were lacerated, and a branch of the middle meningeal artery was ruptured by the sudden dipping down of the sharp serrated edge of the detached bone, the furrows of which are distinctly seen on the piece of bone which I now hold in my hand. This, gentlemen, stood perpendicularly upon its edge, buried in the substance of the brain. I seized it by its upper edge, with a pair of forceps, and removed it from the wound, without any difficulty. Active hemorrhage immediately followed from the wounded meningeal artery. This was at once ligated, and the hemorrhage ceased. The wound was carefully sponged, and all the detached portions of the brain, and coagulated blood removed; the flaps approximated and their angles united by the interrupted suture. Adhesive plaster, lint, and a double headed roller, neatly adjusted, completed the dressing.

Our little patient being placed in bed, we administered a laxative enema, which emptied his bowels freely. We then left

him, with directions to take the following: ℞. Sulph. magnes. ℥i., tart. antimo. grs. ij., water ℥ vj. Of this solution he was ordered to take a table-spoonful every half hour until it produced free catharsis. In a word, his constitutional treatment, was rigidly antiphlogistic, and his diet strictly farinaceous. In a few days he was rational, and nothing unusual or important occurred until about the 12th day from the accident. The wound then began to show indications of fungus cerebri.

The flaps receded, the wound opened, and a soft pulpy or gelatinous mass, of a dark brown or mahogany appearance, protruded through the opening in the bone and integuments; and continued rapidly to increase in size, until the tumor was, in a few days as large as a hen's egg. The wound no longer suppurated healthy pus, but discharged a serous or sero-purulent fluid. The patient though perfectly rational, became peevish and fretful, with accelerated pulse, ranging from 100 to 120 beats in a minute. His tongue became foul, and his thirst urgent, with paroxysms of delirium. For these symptoms he was bled, and a full dose of calomel and Dover's powder administered, followed by castor oil. This produced a free discharge of dark offensive matter from the bowels, with manifest abatement of the constitutional symptoms.

Fungus of the brain seemed now clearly established; and in the midst of such a contrariety of opinion as to treatment, what was to be done?

Styptics, escharotics, &c., have been tried, and condemned as inadmissable, by high authority. *Excision* with the knife and by ligature, has been followed by nausea, syncope, coma and death. *Pressure*, which seemed to have the sanction of Bell, Cooper, Stanley and other eminent surgeons, was, by the illustrious Baron Larrey, disapproved of; and the only case he ever cured, was treated with the mildest dressings—lint saturated with camphorated oil of cammomile, cooling drinks, fresh air, &c. And in this case he admits the tumor was small.

Sir A. Cooper when recommending the treatment by pressure, advises it to be made with adhesive plaster, and compresses of lint wet with liquor calcis.

Mr. Stanley, though rather favorable to the use of pressure, only employs it, "in as much as it appeared evidently to check the *protrusion*, and was mostly borne without inconvenience." Evidently limiting its use to those cases where the dura mater was entire; for he adds, "the idea, however, that

when the brain *protrudes through* the dura mater, *pressure* can effect its return, is *quite untenable.*"

Here I had a case, with deep seated injury of the brain, its membranes lacerated; and if not "*the brain*, protruding *through* the dura mater," there was a vascular organized, fungus growth of the brain, protruding through the dura mater. To effect the return of which, according to the views expressed by Mr. Stanley, pressure is inadequate.

I however determined to make the effort, and to give the remedy a fair trial. But the question which now occupied my most anxious consideration, was, how shall that pressure be so graduated, as to accomplish the desired object, and at the same time, avoid the serious symptoms, which sometimes follow its application?

I tried Sir A. Cooper's plan of dressing with adhesive plaster and a compress of lint, but found it produced a feeling of pain in the circumference of the wound, with nausea, and a disposition to yawn and gape, the pupils also became slightly dilated, indicative of approaching coma. Consequently, I was compelled to abandon this *mode* of applying pressure. The objection to this plan is, that it makes the degree of pressure at once, and stationary; the adhesive plaster holding firmly, whatever degree of pressure is made in its application. To make the pressure great enough to destroy the vitality of the fungus, and occasion sloughing, produced in this case, such disturbance in the sensorial functions, as threatened the life of my patient.

To graduate the pressure, and to increase the degree from time to time, until sloughing was produced; or the action of the absorbents, should be able to remove the superabundant fungus growth, seemed to be the true indication of cure.

To accomplish this object, I applied pledgets of lint saturated with olive oil, and covered it with a piece of oiled silk, and then over it, applied a piece of double convex-oval shaped sponge, expanded to its fullest extent, by being saturated with warm water, and then the water pressed out of it; the whole, confined by a bandage four inches wide, and split at each end so as to make three tails, by which it was tied on the opposite side of the head from the wound. The sponge being soft and elastic, yielded somewhat to the pulsations of the brain, and the ties of the bandage being tightened from time to time, my patient was enabled to bear the requisite pressure—the *degree*, being regulated by the effects upon the sensorium.—When the bandage was drawn too firm; pain, nausea, pau-

ticulation and dilated pupils, were the symptoms induced. By slacking the bandage these symptoms were relieved. The circumference of the sponge was such, as to cover the opening in the cranium, and over-lap an inch or more upon the firm margin of the wound in the bone. Thus, that portion of the fungus, which over-lapped the margin of the surrounding bone, was caught between the compress and firm parts underneath it, and its vitality destroyed; and in a few days I had the satisfaction to see that portion of the fungus slough off, leaving the remainder of the tumor, reduced at its base, to the circumference of the opening in the bone—its prominence also, being much reduced. The discharges from the wound at the same time becoming more healthy.

By perseverance in this plan of dressing, and strict attention to constitutional treatment, I succeeded in reducing the fungus to a level with the integuments. I then reduced the size of my sponge, to very nearly the open space in the bone, and by its soft and elastic nature, it moulded itself to the opening in the cranium, thus, following the tumour, compressed it within the cavity of the skull. Under this mode of dressing, the wound cicatrized, and in about three months from the date of the accident was fully healed.

It is worthy of remark, that notwithstanding, the extensive lesion of the brain, and the actual loss of its substance; the boy has the most perfect use of his mental powers, and learns as fast at school as other boys of his age.

In the treatment of this case and its favorable termination, I present one instance at least, in which the brain protruded *through* the dura mater, and in which *pressure* did effect its return; contrary to the views entertained by Mr. Stanley and sanctioned by Mr. Samuel Cooper in his Surgical Dictionary.

There is nothing new, I am aware, in the treatment of fungus of the brain, by *pressure*. The only thing I claim as original, and worthy of notice, is the *manner* of applying it.—The *material* used to graduate the pressure, *the sponge*, and the many-tailed bandage, so adjusted, as by tightening the ties, at short intervals, the pressure is so graduated at each dressing, as to be borne without producing the cerebral disturbances to which I have alluded.

This method I have no where seen recommended or used by any writer on the subject. From the success attending its use, in the only case in which I have tried it, I confidently recommend it to the consideration of my professional brethren.

Case 2d.—Fatal diarrhœa from structural lesion of the colon.—Joseph Campbell, a laborer, aged 35 years, admitted Nov. 25th, 1845. Has had diarrhœa for a week,—discharges thin, and of a yellow color, occasionally tinged with blood,—from eight to ten stools a day, for several days. Tongue is furred, and inclined to be dry. There is but slight soreness of the abdomen, when pressure is made by the hand. Pulse 80 a minute, small and weak; thirst urgent; skin not morbidly warm, but dry; emaciation considerable.

Patient attributes his attack to exposure to inclement weather.

A single dose of Dover's powder arrested the diarrhœa.

26th.—Has had no discharge from the bowels since he took the Dover's powder,—evidently sinking; voice feeble; countenance sunken; pulse 88 a minute, and feeble; no tenderness of the abdomen; tongue has cleaned off, and is moist; stimulants were given pretty freely, with nutriment of a farinacious kind.

27th.—Declares himself to be much better.

28th.—Diarrhœa returned,—has had eight discharges from his bowels to-day,—astringents were freely given.

Dec. 1st.—Diarrhœa suspended.

5th.—Slight return of bowel complaint; takes hydrarg. cum creta and Dover's powder, with sugar of lead and laud. injections.

10th.—Worse; frequent stools; great prostration; pulse 112 a minute; no abdominal tenderness.

13th.—Took to-day, copaiva mixture, made thus,

℞ Bal. Cop. ʒss.
Hydrarg. cum creta, ʒij.
Pul. Dov. ℈ij.
Sugar, ʒss.
Mucilage, ʒij. M.

a tea-spoonful every 3d hour.

14th.—Medicine omitted, it having vomited him.

15th.—Discharges frequent, thin and yellow, with some tenesmus.

16th.—Worse; skin and hands cold; hiccough.

20th.—Sinking—more decided tenesmus—stimulants were given.

31st.—Died—after an uninterrupted procession from bad to worse. On the 30th his discharges were thin and yellow, and the hiccough had left him.

Sectio cadaveris.—Abdomen.—The stomach and small in-

testines were altogether natural in appearance. Colon,—along its entire tract from the caput cœcum coli to the rectum, was studded with ulcers, generally of the size of a split pea, but several of them much larger. These larger ulcers had penetrated through the mucous and muscular coats down to the peritoneal investment of the bowel. The liver, and spleen, also the rectum, were healthy in aspect and size.

Reflections.—There are four points in the above case to which we would briefly call the attention of the reader. First, the absence of abdominal tenderness, during the entire progress of the structural lesion of the colon, which proved fatal. Second, the very small amount of blood discharged; third, the slight constitutional excitement manifested, and fourth, the inadequacy and consequent inefficacy of the remedial means employed to arrest the disorganizing process, going on in the mucous tissue of the colon.

The gentleman who treated the above case, relied, to a greater extent than we should have done, on astringents.—Our practice has usually been to prosecute a persistent, yet mild alterant practice, till some decided evidence is afforded of the constitutional agency of the mercury.

Appended to the following cases, we shall discuss very briefly, the best methods of conducting the treatment of the numerous instances of diarrhœa brought into our hospital.

Case 3d.—Fatal case of Diarrhœa.—Richard Bradshaw, aged 33 years, a carver, was admitted June 22, 1846. Patient states that he has been sick for two weeks with bowel affection; has been much exposed on the Ohio river in a flat boat,—says that he had sixteen stools yesterday.

Symptoms.—No tormina or tenesmus—alvine discharges frequent, partly fœcal and partly blood—has no tenderness of abdomen—thirst not very urgent—pulse 90 a minute, small and weak—skin of a temperature a little above natural—tongue slightly coated. Under the use of calomel in small doses, combined with ipecac and morphine, the patient improved.

23d. The copaiva mixture was given.

25th. Condition worse—has had fourteen stools during last night: no blood in them—were thin, and of a green color. To-day he took sugar of lead and opium.

26th. No tenderness on pressure of the abdomen—stools thin, frequent, but not bloody. Took calomel, opium and ipecac.

27th. Pulse 140 a minute—augmented debility—emacia-

tion rapid—alvine discharges frequent. Opiate and astringent injections were used.

30th.—Hiccough—some tormina and tenesmus—sinking.

July 1st.—Grows worse—carbonate of ammonia given—stool involuntary.

2d. Died.

Sectio cadaveris, ten hours after death.

Abdomen.—Ileum, was of a deep red aspect in its mucous coat in its lower part—colon thickened in its whole extent—its calibre much contracted, especially in the descending portion: completely studded with small ulcers in its whole extent of internal membrane; mesenteric glands were enlarged; the urinary bladder was thickened, and the mucous coat of a deep red hue; the rectum was likewise, in its mucous coat, of an intensly red appearance.

The other organs of the body healthy in size and appearance.

Reflections.—This case partook in a slight degree of dysentery.—The absence of tenderness on pressure, and the mild symptoms of febrile action in the system, were in strange contrast to the deep and fatal disorganization which was at work in the colon. The rapid emaciation and great prostration of the patient evinced some grave lesion, which the necroscopy amply confirmed.

Case 4th.—Fatal case of diarrhœa.—Wm. Crawley, 24 years of age, a farmer, was admitted June 3d, 1846. Has had bad health for a year, during which time he has suffered from repeated attacks of intermittent fever.

Symptoms.—Bowels much affected, ten stools during the last twenty four hours;—enlarged spleen; hemorrhoidal tumors, of three months duration; slight tenderness upon pressure on the abdomen; alvine evacuations consist mainly of undigested food, and are frothy. The following mixture was given.

℞ Bal. Cop. ʒi.
Cret. prep. ʒi.
Tinct. Opii, ʒss.
Tinct. Kino, ʒss.
Sugar, ʒi.
Mucilage, ʒvj.—dose ʒss, every three hours.

4th. Feels much better; bowels still very loose; medicine vomited him—pulse 100 a minute and weak; hemorrhoidal tumors retracted. Took blue pill, camphor, ipecac, and morphine—with whiskey toddy. Has three strictures in the membranous part of the urethea.

5th. Took calomel, opium and sugar of lead.

7th. Improved—took port wine freely—four stools, green and fetid—appetite good—tongue clean.

9th. Took nitrate of silver, one grain, with one fourth of a grain of morphine every 3d hour.

Diet of thickened milk.

10th. Worse—febrile exitement—pain in the abdomen; calomel, ipecac and morphine were given, and a blister applied to the abdomen.

13th. Pulse frequent and weak, but slight pain in the abdomen—three stools—no tenesmus.

16th. Is ptyalized—greatly improved—omit calomel—took copaiva mixture—also port wine, moderately.

July 3d. Discharged—cured.

6th. Readmitted—ordered the copaiva mixture.

17th. Worse—enemata of sulph. morphiæ in a solution of starch given.

18th. Pulse weak—great pain in the bowels.

20th. Worse—stools frequent—rapid sinking. Carb. of ammonia was given with wine whey.

23d. Most intense pain in the abdomen, which is tense and hard—pulse small, thready and frequent. Vomits a green fluid.

24th. Died.

Sectio cadaveris, twelve hours after death.

Abdomen.—The peritoneum through its whole extent over the viscera exhibited a dark red color. Adhesions to the intestines, from plastic lymph of recent formation, and a copious effusion of the same inflammatory product spread over the viscera. The peritoneum lining the walls of the abdomen was of a uniform red aspect. The spleen was enlarged; liver was healthy; the mesenteric glands augmented in size, and indurated; the mucous coat of the small intestines was of a deep red color; ulcerated spots were found in the ileum and to a greater degree in the colon. The mucous membrane of the urinary bladder of a deep red color.

Reflections.—The severe abdominal pain experienced by the patient was owing to the peritonitis, which destroyed life. It is a source of regret that we did not return to the mercury, upon the readmission of the patient—for our conviction is that by the renewal of the alterant agency of that great remedy the inflammatory action might have been again controlled.

Case 5th.—Diarrhœa fatal.—Amos Bush, 43 years of age,

millwright, admitted May 30th, 1846. The patient states that he has labored under bowel affection for three weeks.

Symptoms.—Some tenderness on pressure over the abdomen; spleen considerable enlarged; tongue dry, red at the tip, and coated towards the root; ten stools in the last twenty-four hours, they were thin, watery and without pain; a few lenticular spots over the front part of the chest and abdomen; pulse 120 a minute, pretty firm and full; skin moist.

Took two grains of calomel, one of ipecac, and six of prepared chalk every second hour, and a large blister was applied to the abdomen.

31st. Slightly improved—three alvine discharges; medicines continued.

June 1st. Worse—four stools—morphine added to the prescription.

2d. Died.

Sectio cadaveris, fourteen hours after death.

Abdomen.—Ileum, two feet of lower part very red externally and internally—four ulcers, each of which were six lines in length, were discovered at the lower portion of the ileum; they were evidently the eliptical plates in a state of enlargement and ulceration. The head of the colon was of a dark aspect, with five small ulcers on the internal membrane.

About half an ounce of blood was effused into the mesocolon at the head of the colon; the mesenteric glands were considerably enlarged, but not indurated; the spleen was about three times its normal size, and of a nutmeg color. The other viscera and parts of the body, were healthy.

Reflections.—Perhaps, this case might legitimately be put down as a genuine attack of typhoid fever. The four prominent characteristics of that form of fever were present—lenticular spots—enlarged spleen—enlarged mesenteric glands, and ulceration of Peyer's glands. The diarrhœa was severe before his admission, and the patient seemed to die of that kind of vital depression so common in severe onsets of intestinal irritation.

Perhaps, we have given a sufficient number of cases illustrative of the form of disease. During the whole of 1846 fifty-six cases of diarrhœa were brought into the hospital and of these twenty-five died. Three of the fatal cases came from the Rio Grande, on whose unhealthy banks a great many of our soldiers died of diarrhœa. The three above alluded to, were volunteers from the state of Ohio, who had gone to participate in the glory of our arms in the Mexican war, but who

were obliged to return on account of the protracted bowel affection under which they labored, and of which they died. Some of these twenty-five fatal cases of diarrhœa were admitted almost in articulo mortis.

Our plan of treatment varied, of course, with the emergent difficulties of the case. The most successful practice was the moderate mercurial, combined with the opiate. The balsam copaiva did not in our hands answer the expectation, which we once entertained of its efficacy. Though one of my colleagues, a gentlman well qualified to decide on its merits, reposed great confidence in the remedial power of the copaiva mixture.

In several cases of a more subdued form we gave the nux vomica, in doses of one-fourth to half a grain, every three hours, combined with the eighth of a grain of salt of morphine, with decided benefit.

Astringents, such as kino, acetate of lead, sulphate of copper, and sulphate of iron, were given, but not with any very satisfactory results. The nitrate of silver in doses of from a half to two grains, united with half a grain of opium, appeared to exert a very propitious influence in several bad cases.

Counter-irritation, by vesication, acted favorably. A very strict regulation of the ingesta was of indispensable importance in conducting to a favorable issue.

ART. III.—*Case of poisoning by the Wild Cherry. By* GEO. K. PARDEE, M. D., *of Wadsworth, O.*

A little boy about three years old, had been in the habit, in the fall of 1846, of resorting with other boys to a tree of the Wild Cherry, (Prunus Virginiana,) and of eating freely, and at all times, of the cherries, the tree being of easy access, and being loaded with the fruit, and the ground underneath well covered with them. He seemed to have swallowed great numbers of them whole. One morning, while apparently in the enjoyment of his usual health, he began to complain of pain in the epigastric region, and soon after vomited, and discharged quantities of whole cherries; he had convulsions, was drawn backwards, rolled his eyes about, and died in a short time, before any medical aid reached him.

I made a post-mortem examination on the day subsequent to his death, and found, on opening the abdomen, that the stomach and intestines were of a dark, modena-red color, such

as would be caused by the juice of the wild cherry infiltrating through the walls of the stomach and intestines. And on opening the alimentary canal, I found it almost literally filled with cherries, in every condition, from that of whole ones, to the stones stripped of the skin and pulp; sometimes a cluster of cherry stones were lodged behind the valvulæ conniventes, and again the cherries entire in the large and small intestines, and extending from the stomach to the rectum.—I think it would be a safe estimate to say, that there were at least two quarts of cherries in the whole alimentary canal, and there was a very trifling quantity of feculent matter.—Indeed there was nothing which was not colored a deep red by the juice of the cherries. This is only an estimate of the quantity, as I did not measure it.

Remarks.—This is a case interesting in more respects than one. Can we explain why it was, that the habit of eating the cherries had been practiced *for days*, if not *for weeks*, and no bad symptoms had been developed until those alarming ones, which immediately preceded his death?

I ought to have remarked that his death took place in the morning, that he eat no cherries that day, that he slept well through the night, and was up, and playful in the morning, until he complained of pain, eat no breakfast, and died probably in less than an hour.

The wild cherry, as we all know, contains some portion of hydrocyanic acid, and that the acid when taken in fatal doses, destroys life *suddenly;* but are we thence to conclude that therefore, this was a case of poisoning with that acid? True, the sudden development of the symptoms, would lead to the conclusion that some powerful agent had been at work to extinguish the vital principle so suddenly; but if we adopt this explanation of it, how shall we account for the uninterrupted good health, for so long a period after taking the cherries? Has the human system the power to extract hydrocyanic acid, from a substance affording it, and being uninfluenced by it in any sensible way, until a sufficient quantity has accumulated to destroy life at once? Some articles have a cumulative power in the system, I admit, as for example, digitalis. But digitalis is a potent article; a few grains suffice for this result. Not so, the wild cherry. Multitudes of boys, yearly are in the habit of eating them in large quantities, and for a long period of time, without experiencing any unfavorable consequences, as every truant boy can testify, who lives where the wild cherry abounds.

How then could death be produced in this way? The convulsions which preceded death would seem to indicate that the brain and nervous system were suffering from the depressing influence which was in operation; but may it not have been the case that the sensorium was acted upon in a manner similar to that which follows, when a man receiving a sudden and unexpected blow upon the epigastrium, falls down and dies from the profound impression made upon the sensorium commune? The impression being made at the sentient extremity of the nerve, and the shock communicated thence by reflex action from the extremity to the centre, according to Marshall Hall's doctrine of reflex action.

This latter view seems more satisfactory to my mind than the former.

EDITORIAL DEPARTMENT.

OUR NEW ARRANGEMENT.

It will be perceived that the present issue includes two numbers of the Lancet, Nos. V and VI.—which closes the *Sixth* Volume. By this arrangement, we are enabled to close the volume on the first of January, instead of March, as heretofore; and what is still of more importance, our publishers will be able to issue the first No. of volume seventh, in January. We will thus accomplish what has long been a desirable object, that of commencing the volume with the beginning of the year;—an arrangement which will prove convenient to the editors, publishers, and patrons.

The present number is almost wholly occupied with the reprint of *Andry on Diseases of the Heart.* It was thought to be important to complete the entire work in the sixth volume; and for this purpose, our usual variety has been necessarily omitted. The re-print, however, is a work of great merit; and our readers, we presume, will be satisfied with the arrangement. A title page and preface will accompany Andry's work, and an index and title page will be attached to the Lancet; so that each can be bound separately, if desired.

By reference to the advertisement on the cover, it will be perceived, that several changes have been made. In the first place, the work will be published *monthly;* and in addition to the usual variety of matter, will embrace a series of *Clinical* lectures. It will be seen, also, that the editorial department has been strengthened by securing the services of Professor Harrison. The reputation of Prof. Harrison as a lecturer and writer is too well known to require comment; and we feel every confidence, that his services will prove not only acceptable, but also highly beneficial to the patrons of the Lancet.

To correspondents.—Several original communications, which were intended for the present number, have been necessarily omitted, in consequence of the large space occupied by Andry's work. They will be inserted at an early period.

INDEX.

Acteate of morphia, action of, upon children, 47
Address to the graduates of Geneva Medical College, 89
Adulteration of medicines, 270
Albuminuria in pregnant women, 259
Alkaline urine in health, 263
Almanac, Am. Medical, 276
Amputations at Monterey, 103
Aneurism of the aorta, Buckner, 160
Aphonia, treatment of, 45
Arsenic in cancerous diseases, 257
——— poisoning with, 264
Arteritis, 107
Asphyxia induced by inhaling ether, 113
Assafœtida during pregnancy, 108

Bell on winter fever in Arkansas, 227
Bennet on the Uterus, 98
Biographies, medical, 98
Births and Deaths, influence of periods of day, 262
Blanton on surgical cases at Buena Vista, 154
Blisters, on the young subject, effect of, 187
Blood in puerperal fever, 196
Blood-letting from the jugular vein in diseases of children, 33
Bones, disease of, from rheumatism, 194
Braithwaite's Retrospect, part 14, 27
Brockway on tumefied os uteri, 170
Bronchitis, chronic, treatment of, 93, 201
Buckner on aneurism of the aorta, 160
——— on fungus cerebri, 273
Bones, subperiosteal extraction, 245
Bubo, mercury in the pus of, 251
Burns, treacle in, 257

Cajeput oil as a remedial agent, 190
Cancrum oris, Tweed on, 12
Cancer, treatment of, 263
Carbonic acid in epidemic cholera, 44
Caries of the teeth, 45
Cerebro-spinal meningitis, 188
Chomel's distinctive characters of measles and scarlatina, 48
Clairvoyant doctoress, 49
Clinical statistics of the learned profession, 117
Cold hip-bath in irregular menstruation, 46
Correspondence, domestic, 129, 130, 131
Cold water in over doses of opium, 98
College of Physicians and Surgeons, 206
Concours, abolition of, 206, 241,
Condie on diseases of children, 233
Croup, pseudo-membrane, 30

Dawson on diseases of Green county, Ohio, 94
Delirium tremens caused by Ether, 190
Dental advertisements, 52
Deafness, treatment of, 235
Diabetes, alkalies in, 193
Discoveries in 1846, 105
Dissection wounds, prevention of infection, 246
Doctor, new, 51
Doctors, summary mode of making, 35
Doctress, clairvoyant, 49
Dorsey on epidemic fever, 76
Dysmenorrhœa, 256

Eclampsia parturientium, 37
Eczema of the scalp, 40
Empiric, honesty of, 49
Empirical advertisements, 118, 267
Empiricism, notices of, 49, 118, 202, 267
Enteritis, gastro-follicular, 18
Epilepsy, 196
Epistaxis, means of arresting, 45
Ergot, effects of on fœtal heart, 268
Erysipelas, linear blisters in, 255
Ether, effects of, 53, 107, 108, 111
——— horse killed by, 197
——— in lithotomy, 110
——— parturition, 112, 182
——— tetanus, 252
——— muriatic, 108
Eye, rheumatic inflammation of, 107

A MANUAL OF DIAGNOSIS

OF THE

DISEASES OF THE HEART;

PRECEDED BY CLINICAL RESEARCHES,

CALCULATED TO

FACILITATE THE STUDY OF THESE RESEARCHES.

BY

DR. FELIX ANDRY,

FORMER "CHEF DE CLINIQUE" AT LA CHARITE HOSPITAL.

TRANSLATED FOR THE "WESTERN LANCET,"

BY

W. S. CHIPLEY, M. D.,

AND

R. P. HUNT, M. D.

CINCINNATI:
ROBINSON & JONES.
1847.

ROBINSON AND CO., PRINTERS,
Corner of Third and Main Streets.

PREFACE.

Much has been written on the heart, especially in the course of the few past years. But can this be a reason for ceasing to call public attention to the subject? Perhaps so, if all the problems that attach themselves to this study were at present resolved; if, upon all the principal features of the physiological and clinical history of the heart, a universal concert had replaced the discord which, for so long a time, checked the progress of the science. But it is not thus; we may be even justified in declaring, that at the present moment few organs contribute so much to differences of opinion and multiplied discussions, as the heart. Those who have been willing to undertake this part of our art, and who have even consecrated lengthy researches to it, have encountered doubt and hesitation in all the divers systems, and with very little certainty in the diagnosis.

This scepticism, this incredulity, constitutes, in my opinion, anachronism. I say it persuaded of its truth; and it is this happy belief in the certainty of our actual means of exploration, and the disease, to proclaim aloud that which may place the science upon a footing that will no longer permit it to be said that it advances by hazard, that have induced me to add this small volume to those which have preceded it from others, in a great part from different and even contrary schools.

I am aware that among these last there are those who announce this confidence in the validity of their theories, and give the assurance that to them alone appertains the thread of Ariadne, without which the clinical study of the heart is a

labirynth where one would be lost. Between them and us the public will determine. The dispute, it seems to me, is very well worthy of its interest.

I have been impressed by another idea in the composition of this work—a desire to simplify, as much as possible, the study which is so often truly arid and repulsive, thick set, as it is, with difficulties proper to it, and still more so with those that are added to it by a bad system of observation.

This small volume addresses itself, then, to physicians, who will find in it a collection of clinical facts, of which the analysis, verified by autopsies, will demonstrate to them to what a degree of precision the diagnosis of diseases of the heart is capable of attaining at the present time; and to students, who, in this *manual of diagnosis* will learn how we arrive at these practical results, the veritable conquests of contemporaneous clinic.

CLINICAL RESEARCHES

FOR

FACILITATING THE DIAGNOSIS

OF

ORGANIC DISEASES OF THE HEART.

Of all those diseases of which the progress of medicine has latterly improved the diagnosis, but few can, in my opinion, compare with the organic affections of the centre of circulation. Such at least is the conclusion drawn from a series of observations that I have made in the wards of Professor Bouillaud, for near six consecutive years, either as a simple observer of the successful practice of this gentleman, or, during the last two years as *chef de clinique*.* I would even say the diagnosis of these affections seems to me to offer a degree of certainty almost mathematical, if I did not fear that such an assertion, made so prematurely, would appear to my readers as an exaggeration.

And, indeed, the variety of opinions held by the majority of practitioners relative to the theory of the normal sounds of the heart, have this unfortunate result, that so far as several of them are concerned, the morbid sounds of this organ, to which especially, as we will hereafter see, diagnosis at present owes its certainty, are far from having that semeiological value which so properly belongs to them, and that some of them are at the present stage of science enveloped in mystery. One of those practitioners, whose talent for observation I am far from questioning, has said, "*that we can no more explain, by the theory of Mr. Roaunet, than by that of others,*

* There is no English term, by which this can be translated. The chef de clinique is found only in those wards which are attended by a professor of clinical medicine; he is a graduate, and without residing in the hospital building has charge, under the professor, of the service.

all the anormal sounds heard in the heart, and thus arrive at the diagnosis of the special seat of the disease." (Chomel's Pathological Générale, 3rd. edition, 1841.

This assertion I shall submit to the test of facts. I shall endeavor to ascertain if, on the contrary, science does not possess means of exploration by the aid of which lesions of the heart may be diagnosticated, not only in their ensemble, but often decomposed by the observer, into their anatomica minutiæ; and if the most faithful and most precise of those means, is not auscultation based upon the theory of Mr. Roaunet; a theory which, thus put in connexion with pathological facts, if it explains all of them, will receive a brilliant confirmation.

After this clinical part, I will commence a succinct study of the means of investigation, which may have furnished us the principal diagnostic signs; I will note their respective value, their semeiological bearings, in such a manner that those who in their turn may desire to investigate diseases of the heart, may find in this summary a kind of compendium of diagnosis. Finally, I will point out the practical utility of these investigations and show that far from being intended only to gratify foolish curiosity, they are susceptible of therapeutical applications of the highest importance. Moreover, I wish it to be understood that what I am about to publish are clinical researches. I will recur with the reader to a train of facts that we will examine together, gradually passing from the most simple, to the more complex, analyzing all with the same care, and receiving from some the where-with-all to clear up the history of others; and then, whilst all these facts will thus furnish us what they can of information and practical lights, in carefully collecting the results of this examination, in assembling these sparse materials, these successive acquisitions, we can not fail to verify the deficits which may exist. We will thus at the same time, alike discover what is possessed and what is yet wanting in the science; and this sort of inventory, if I may thus express myself, this comparative approximation of our wealth and of our poverty, will have, I hope, the advantage of showing some observers that we are less poor than they suppose, and of pointing out to others that which still remains to be acquired, so as forcibly to address the zeal of all, and direct more profitably the efforts of those who desire to devote themselves to the development of our art. Such is in short the essential design of this memoir.

FIRST PART.

EXPOSITION OF FACTS.

Before commencing the clinical review, I think it necessary first to establish as succinctly as possible, the theory which shall direct us in appreciating the sounds of the heart. And here perhaps more than elsewhere, a minute knowledge of the normal state should necessarily precede the study of the anormal.

Four elements, in my opinion, should be admitted as entering into the production of the sounds of the heart.

1st. The shock of the apex of the organ against the parietes of the chest;

2nd. The gliding upon each other of the opposite surfaces of the pericardium;

3rd. The friction (frottement,) of the sanguinenous column against the interior of the cavities of the heart;

4th. And lastly, the sudden readjustment of the valves, valvular clacking.

Of these four conditions, the last is the essential, the predominant. But, if the other three are habitually masked by it, if each of the three first is normally aphonic, it is nevertheless true, that, in pathological conditions, each can in its turn predominate. This is a fact susceptible of demonstration, and which it is especially necessary to bear in mind in the appreciation of the morbid sounds which occupy us.

Thus, 1st., *the shock of the point of the heart* habitually takes place, in my opinion, without any distinguishable sound; but in pathological circumstances we see this shock, by its exaggeration, produces sometimes a dead, dull, distinct sound, readily distinguishable, very different from the ordinary sounds of the heart, and sometimes a peculiar tinkling, (*the auriculo-metalick*,) a sound of but little symptomatic value, as we will hereafter see, and really compatible with the normal state.

2nd. *The gliding of the opposite surfaces of the pericardium.* So long as these surfaces are lubricated, humid, and perfectly polished, no sound results from their friction, but let

this polish become effaced, let false membranes be deposited upon these opposed surfaces, and there will immediately result a morbid sound which I shall here be content with having mentioned.

3rd. *The friction of the blood against the interior of the cavities of the heart.* As the last this friction is not in my opinion the cause, in the normal state, of a perceptible sound, the endocardium, a polished membrane, too readily facilitates this friction for it to produce marked sounds; but if this endocardium becomes partially thickened, or covered with vegetations, or encrusted with a chalky deposit, or its orifices become contracted, etc., all of these new conditions, by increasing the friction of the sanguineous wave, become so many powerful causes of anormal sounds.

It is to this cause that we must refer all the sounds produced by any derangement in our fourth condition, the *valvular clacking*, no lesion whatever of the valves producing any decided sound, save as a consequence of increased friction. One more word upon this clacking as it takes place normally, and we will have finished these preliminary considerations.

The action of the heart is divided into two successive and distinct times or sounds. Now what passes in the first time? Let us take, for instance, the left heart; whatever we may say of the left side being applicable to the right, whose movements are exactly synchronous. In the first time, the left ventricle contracts, and the greater part of the column of blood escapes by the open orifice of the aorta, whilst some little of it strikes the bicuspid valve, and thus adjusting it, stops all flow towards the auricle. It is this sudden adjustment of the bicuspid valve which produces the first sound.

Mr. Bouillaud adds to this re-adjustment, the collision of the valvular lamina, which he says are struck by those opposite. I acknowledge that it has always been difficult for me to appreciate this circumstance; doubtless because I explain with a slight difference, the mechanism of the play of the valves. According to Mr. Bouillaud, the adjustment of the auriculo-ventricular valves would be caused, not solely by the shock of the sanguinenous wave, but principally by the action of the *chordæ tendineæ* which are inserted in the valves, and which would thus have a double use—1st, to replace and to stretch these moveable lamina, by exerting traction upon them from their circumference to their centre; and 2d, this re-adjustment having taken place, to prevent their inversion by the shock of the blood towards the corresponding auricle. Of

these two uses, I acknowledge that the second has always seemed to me to be the principal. For how are we to conceive that tendons fixed more or less perpendicularly to the ventricular face of the valves can be able, by contracting, to draw these valves in a horizontal direction? Is it not more natural to regard these chordæ tendineæ only as ingenious accessories, the necessary complement of a pump, both suction and forcing, but which is destined only to the support of one of the valves of this pump, to give it a solid prop, and a sufficient resistance against the action of the liquid which strikes against it? If this theory is true, the tendinous apparatus will be proportionably stronger, as the valve may have to sustain a more decided impulsion. This is what does happen; for we observe that the bicuspid valve is furnished after this manner, with the two most vigorous *columnæ*; and that it receives the insertions of about twenty-five tendons, the marked inferiority of the tendinous system of the bicuspid, being in proportion to the less powerful contractions of the right ventricle. Moreover, if a tendinous apparatus is necessary to valvular occlusion, why are the aortic and pulmonary valves unprovided for? Do not the arterial orifices require occluding as perfectly as do the auriculo-ventricular? Let us see in the *chordæ tendineæ*, only a means of resistance and not an arrangement for closing, and the absence that we have just noted will no longer astonish us, when we remember how slight the systolic force of the aorta and pulmonary arteries is, compared to the ventricular systole, how unnatural it is to displace from the direction of the ventricles those valves which the influence of the blood has just readjusted by its reflux movement after having displaced them by its issue. But this leads now to the consideration of the second sound.

Now what takes place in the second sound? The ventricle dilates, and thus gives rise to a tendency on the part of the blood to flow thither. But it can come from two directions; 1st, from towards the auricle, and there is nothing to oppose this, for the species of suction exerted by the dilating ventricle, depresses towards its interior the bicuspid valve, and the sanguineous contents of the auricle thus enter freely into the ventricular cavity; 2d, this suction, of which I have just spoken, is also exerted upon the blood already thrown into the aorta, a part of this blood then returns, thus obeying both the attraction of the ventricle, and the pressure exerted by the elastic walls of the vessel, but the return of this retrograde wave immediately gives rise to the adjustment of the aortic

valves, and this abrupt adjustment is the cause of the second sound. Thus then: the first sound, is the clacking of the bicuspids, the second sound, clacking of the aortic valves. Be it mentioned, however, more with reference to the pathological than to the normal heart, that at the moment when one of these valvular arrangements is adjusted, that when one of these orifices is closed, the other valvular apparatus becoming depressed, the corresponding orifice is traversed by a jet of blood, first, the aortic orifice, and in the second time, the bicuspid. And furthermore, let it be borne in mind, that this condition is itself so favorable to the production of a new sound, that even physiologically, if ever so little exaggerated, if, for instance, the column of blood should be expelled with a little too much quickness by the aortic orifice, an accessory sound can take place during the first time; as an example of this, we find sometimes, a slight, soft, aortic souffle, during the first time in persons who have just run or walked rapidly a short distance; a souffle that I have more than once found in patients at the moment of their arrival at the hospital, but which has disappeared after several hours rest. But it will be asked: if the swiftness of the flow of the blood, suffices for the production of a souffle, how comes it that this takes place only at the aortic, and never at the bicuspid orifice? Why should it happen only during the first time, and never during the second? I think that there are two reasons for this fact. The first is, that the blood should leave the heart more quickly than it enters, the ventricular systole which drives it out, being more powerful than the auricular systole which forces it in, aided as much as may be by the diastolic aspiration of which I have just spoken. The second reason is the difference in the normal dimensions of the two orifices, the circumference of the aortic being only 31 lines, and that of the bicuspid orifice 46½ lines, thus it is evident that the first is less able than the second to contract without a perceptible effect being the result.

In fine, let us remember that, of the two sounds of the heart, the first is naturally a little obtuse and prolonged, the second shorter and clearer; for in this difference there exists a new proof in support of the theory of valvular clacking. In fact, the first sound is obtuse, because the bicuspid and tricuspid valves have no ambient bodies to propagate their vibrations, except the fleshy walls of the heart itself; and because, moreover, the chordæ tendineæ, which connect with each of them, stiffened both by the contraction of the

calumnæ carneæ, which put them in play, and by the fact of the readjustment of these valves, probably moderating, and in part extinguishing this vibration. The clearness of the second sound, results from conditions precisely opposite, in which we find the aortic and pulmonary valves, which are alike unprovided with chordæ tendineæ, and adhering to two arterial tubes, eminently elastic and vibratory. I come now to the clinical facts.

The number of organic affections of the heart of which I have collected observations, exceeds sixty. Desiring to consider here, these diseases principally in reference to diagnosis, I have felt obliged to put aside all those which have not received the verification of post mortem examination. This condition reduces the facts, that I am about to analyze, to about twenty.

In order to proceed, as I have already remarked, from the simple to the complex, I will begin with a case of hypertrophy of the heart, without a lesion of the valves, sufficiently prominent to have been remarked in the diagnosis. These cases are rare. We conceive, in fact, that the valves are parts so essential to the heart, that this organ cannot become hypertrophied to a certain degree, without these membranous vails participating with it; and after the details into which we have entered, it is readily perceived that in our opinion the least deformity, the least thickening of the valvular laminæ, should be expressed by sounds sufficient to be trasnformed into diagnostic signs.

Observation 1.—*Simple Hypertrophy without any remarkable valvular lesion. Œdema of the glottis.*—A laborer, aged 44 years, was received, on the 26th of September, 1840. He was of a medium constitution, and of a temperament more lymphatic than sanguine. He had labored for twenty-one years in a quarry, had been crushed by a fall, and his chest, at the time of his reception, was still a little prominent before, and notably depressed behind; seeming to carry thus the traces of an accident, which had detained him nearly four months in Saint Louis, where he was treated by the application of eighty leeches to the right side, and thirty to the neck. Five years had elapsed since he contracted what he called a catarrh; and without further specification in reference to this malady, he said it required the application of fifteen leeches to the præcordial region. Apart from these two epochs of his previous life, his health had been habitually quite good. Even at this moment he complains only of a slight

dyspnœa, which began eight days ago, a little cough without expectoration, and a cephalalgia with some dizziness; there is no other notable phenomenon, neither anorexia, fever, or even palpitations.

I examined him with care, and the following are the principal results of that exploration:

The digestive functions are well performed; temperature of the body normal; pulse from 40 to 44, of medium development, unequal, intermittent, irregular, the regular pulsation being sometimes followed by a small pulsation which immediately succeeds it; no præcordial prominence, nor anormal dullness in that region, nor vibratory tremor. The sounds of the heart are remarkable for the same anomaly of rhythm as the pulse, and still more so for their dry tone, somewhat like the rustling of parchment, but without souffle; they may be heard as far as under the right clavicle. The cough is quite rare, and without expectoration; no pain in the chest; the resonance and respiration are good before; behind idem, also on the right side, except at the base, where we hear a sub-crepitant râle with very numerous bubbles a râle; which is found in all the left side, accompanied on that side by a little obscurity in the resonance; a little cephalgia and heaviness of the head; a slight œdema of the inferior portion of the right leg; the patient was able to walk to the hospital without difficulty. With the symptoms which we have enumerated, before us, what shall be our diagnosis? An acute lesion of the respitatory apparatus? This idea is scarcely compatible with the number of the pulsations.

But for the present let us remark in anticipation, that in this case there was pulmonary œdema, a disease but little known, considered as an active malady, but little studied up to the present period, and of which, I confess, the idea had not occurred to my mind. Mr. Bouillaud who repeated the examination the next morning, remained in the same doubt on his part. Nevertheless, he prescribed a bleeding, to the extent of twelve ounces, a pectoral tisan, *un julep et le quart.* As to the heart, what had we a right to admit with the signs I have enumerated, except a medium hypertrophy without any grave lesions of the valves? And yet we could presume this hypertrophy only with a certain reserve, deprived as we were, and that perhaps by the accidental deformity of the chest, of its most ordinary signs: which are as we shall see, an increase of dullness, præcordial prominence, a displacement of the apex of the heart, and as we had here, in place of all

other symptoms of that morbid state, irregularities of the pulse and a parchment tone of the sounds, characters which we will find always responding to a certain thickning of the valves, and very rare without hypertrophy of the heart itself.

For some days the state of the patient remains stationary. The blood drawn is normal. A plaster of pix burgund. with an addition of ant. tar. was applied to the anterior portion of the chest. Yet, the stethescopic phenomena persisted; the pulse became more regular, but it is also more tense, a little vibrating and has gradually risen to 60—64. At the same time the infiltration of the inferior extremities insensibly augments, and the scrotum has become œdematous.

October 16th. The patient complains of more pain. Since yesterday he has suffered with quite an intense affection of the throat; his voice is guttural; deglutition painful; the posterior part of the mouth very red, with swelling of the uvula, but no enlargement of the amygdalæ; countenance quite animated; heat of the skin moderate, but the pulse is at eighty with some intermittence. Prescribed thirty leeches to the neck.

At my evening visit, I found the patient seated upon his bed, laboring under a well marked dyspnœa, with the inspiration a little hissing. In ausculting the chest I heard only a rhonchus which appeared to eminate from a point in the larynx. There is considerable anxiety. The skin is hotter and the pulse from 96 to 100. The leech bites still bleed, nevertheless, I ordered a bleeding to the extent of sixteen ounces, and applied sinapisms to the feet. Notwithstanding these means the dyspnœa persisted, and the patient died at one o'clock, A.M.

Autopsy.—The epiglottis was remarkable for its apparently œdematous thickning, a thickning in which the adjacent parts participated, and especially the arytæno-epiglottidian ligaments. We incised these different parts, and there escaped from them a yellowish pus, recently formed, and infiltrating all the ambient cellular tissue. The glottis was sensibly contracted; the vocal cords were puffed, œdematous, without any trace of suppuration; the ventricular cavities were effaced; the laryngo-tracheal mucous membrane was very pale. The lungs, quite flexible and crepitant, were only engorged posteriorly and very abundantly infiltrated with serum. The heart was remarkable for its volume, the hypertrophy affecting especially the left ventricle. There was a slight thickning of the bicuspid valve. The aortic valves preserved their normal thickness; we remarked only that the tubercle of

Arantius of each of them, was rather more developed and harder than natural. The entire endocardium, the origin of the aorta and of the pulmonary artery were of a very lively red and faded only slightly by washing. This observation, which I have thought it my duty to reproduce entire on account of its interesting character, is calculated to give matter for numerous reflections, above all in relation to the œdema of the lungs; but do not let us forget that what we were particularly interested in was the diagnosis of the disease of the heart. Observe, then, that the autopsy fully verified the symptomatic indications. The signs noted during life were those of simple hypertrophy, they indicated scarcely any thickning of the valves. In this respect the necropsy sustained the diagnosis, neither exceeding or falling short of it. I will content myself with this remark, only adding in reference to the cause of the disease, that we may be permitted to hesitate between the external violence and the acute thoracic affection; but the second cause appears to me more probable than the first.

Observation 2.—*Left Auriculo-ventricular lesion exclusively, with Insufficiency.* Laurena Bavaux, laborer, aged thirty-nine years, entered into our service on the 22d of September, 1840. Her sickness dates six months past; she has tubercles in the summits of both lungs, and particularly the right side. After having satisfied myself in this respect, I passed to an examination of the heart. The patient says she is free from palpitations; the pulse is slightly developed, but this circumstance corresponds with the general emaciation; the præcordial dulness is normal; there is neither an increased prominence of the chest or vibratory tremor; I was then much astonished upon applying my ear over the region of the heart to hear a bruit de souffle sufficiently marked, seeming at first to be present alone in the second time, but becoming more and more pronounced, as I auscultated nearer and more near to the left auriculo-ventricular region, and in this point marking the two sounds and moreover not being continued either in the carotids or in the course of the aorta. With these signs I did not hesitate to announce the existence of a lesion of the left auriculo-ventricular valve exclusively, accompanied by a slight hypertrophy of the heart, the diseased valve should necessarily be patent. The double souffle I explain, by saying: the column of blood rubs against this thickened, puffed and imperfectly mobile valve, 1st. when a part of the column under the influence of the ventricular systole flows

back into the auricle through the imperfectly closed orifice (souffle of the first time;) 2nd. when the entire column, influenced by the auricular systole, and especially by the diastolic aspiration of the left ventricle, enters into this ventricle through the scarcely open orifice (souffle of the second time;) and if this second souffle is more marked than the first, it is from being caused by the friction of the entire wave of blood, the first being the result of the friction of a part of it only. From this difference of intensity between the two souffles, it resulted that the first and more feeble should become imperceptible at a short distance from its seat, and masked by the clacking of the tricuspid valve, whilst the second and stronger is heard even where the clacking of the aortic and pulmonary valves might replace it. Thus there is a blowing sound during the second time of the heart, throughout the whole præcordial region, and during both times in the region of the diseased orifice only. One month after her arrival at the hospital the patient died from the progress of the phthisis; and to speak only of that which now occupies us, we found at the autopsy, the heart of its natural size, perhaps a very little enlarged, when we remember the emaciation of the subject and the tubercular affection; the right cavities distended by newly formed clots; the tricuspid and pulmonary orifices perfectly healthy; the aortic valves likewise healthy, very thin and normal; the left auriculo-ventricular valve thickened, patent, it represents a kind of fibro-cartilaginous excrescence. Now, is not one such fact an irrefutable proof of the truth of our theory? Let us mention, in passing, this peculiarity, that certain grave diseases of the heart, sometimes exist without very marked functional disorder, and that in some degree, without the knowledge of those who are afflicted.

Observation 3.—*Lesion of the Aortic Valves without Insufficiency.*—Ann Prudhomme, a washer-woman aged seventy, on the 19th of May, 1841, entered the wards of the charity hospital. She is a woman of strong constitution, sanguineous temperament, has been sick but three or four times in her life, and does not know of what diseases, but is certain they were not rheumatism or affections of the chest. For two months she has been subject to headache, restlessness, dyspnœa, palpitations, slight cough, and for the last three weeks, with swelling of the inferior extremities.

Upon her arrival I examined her carefully, and so far as concerns the circulation, found the pulse 60, moderately developed and regular. The præcordial region, covered in a

great part, by large mammæ, seems to offer neither increased prominence, anormal dullness, nor tremor. The beats of the heart are deep seated, slightly perceptible to the touch; the two sounds, difficult to hear on account of the fleshiness of the patient, are separate, but the first is accompanied by a souffle, rather rude, sufficiently prolonged, reaching its maximum in the region of the aortic orifice, and of the ascending aorta, and being propagated into the carotids without being there compounded with the *bruit de diable*. The patient complains of palpitations from time to time, even when in a state of repose; her sleep is often troubled by dreams, accompanied with starting. Her legs, and especially the right, are the seat of swelling, with tension and even a slight erysipelatous redness of the skin of the two inferior thirds—no ascites.

What was our diagnosis?

A medium degree of hypertrophy of the heart, with lesion of the aortic orifice especially, without insufficiency of that orifice.

Let us state, in few words, the grounds for the different elements of this diagnosis. And first, of *the medium hypertrophy of the heart;* there is *hypertrophy*, for, as we shall soon see, there is valvular lesion; and the one almost constantly supposes the existence of the other; *medium* for, there is neither vibration of the pulse, nor dullness, nor very sensible beats, etc.; *lesion of the aortic orifice*, for to what time does our souffle correspond? To the first time. Now what occurs during the first time? The left ventricle contracts, as we have said, and the column of blood escapes by the aortic orifice, without being accompanied by any other sound than that which results from the sudden re-adjustment of the bicuspid valve. We have here a souffle in the first time; what does it indicate? An excess of friction (frottement) of a part of the column of blood against one of the orifices of the heart; now, which is the orifice? Evidently, in the first time, there is as much probability of its being the bicuspid orifice incompletely closed, as the aortic orifice imperfectly opened. How then, shall we determine this difficulty? By examining with care the point with which the maximum of the souffle corresponds; particularly if this souffle extends towards the base of the heart, between the mammæ and the sternum, and is prolonged in the direction of the ascending aorta, as far as to the carotids, its point of departure is at the aortic orifice.

But we have said that the lesion was *especially* seated in the aortic orifice. Why then, this reserve, which seems to indicate the possibility of a lesion of the other orifice? It is

because rigorously, this complication is not entirely impossible. In ausculting beyond the bicuspid region, the embonpoint of the patient did not permit us to analyze the sounds with sufficient precision, to be well assured that no trace of souffle mingled with the clacking of that valve. Hence we were justified in inquiring if a slight bicuspid insufficiency did not coincide with the aortic lesion.

Finally, we have said *without insufficiency of the aortic valves.* And, why? Because the second sound, that is to say, the result of the readjustment of these valves, was mingled with no souffle, which would have been inevitable, if a portion of the sanguineous wave had reentered the left v ntricle, through the imperfectly closed aortic orifice.

This patient, who was very promptly restored to her habitual state of health, by repose and digitalis, prolonged her stay in our ward, where she shared the occupations of the infirmary. But at the end of about nine months she was attacked with general acute bronchitis, and died on the 22d of February. During her long stay, I had carefully ausculted her, without even finding any modification in the seat of the souffle of the first time. The following is the result of the autopsy:

The heart is enveloped in a very thick bed of fat. After the removal of the fat, its volume is not much more considerable than natural; nevertheless, the auricles are dilated and the left ventricle evidently hypertrophied. The walls of this ventricle, towards its base, have a thickness of about thirteen lines. (The medium normal thickness is about seven lines.) Water poured into the aorta rises and preserves its level perfectly. Yet, the aortic valves, although sufficient and well formed, are incrusted with a hard osseous like matter, creaking under the scalpel, lineally disposed in a vertical direction to the valves. The internal face of the aorta is smooth and polished. The left auriculo-ventricular orifice appears normal; its valve, of a blackish red, from cadaveric imbibition, is well formed but a little thickened, especially in the part near the aortic valves. It is, however, neither fibrous nor ossified. The right valves are normal.

Is not this case exactly analogous to the preceeding, in the unity of the principal lesion, and in the perfect agreement of the diagnosis and the autopsy?

Observation 4.—*Lesion of the Aortic Valves Exclusively, with Insufficiency.*—A woman thirty-six years old, a seamstress, was recieved into our service on the 11th of December,

1841, having an abdominal tumor, of a very obscure diagnosis, the history of which would draw us too far from our subject. Let us come then to that part of this observation, which, at this moment, must be of predominant and exclusive interest to us. I refer to the examination of the heart. Here again, as with the patient in our second observation, nothing seemed to point to the existence of an affection of that organ. There were no previous maladies,, such as rheumatism, acute affections of the chest, palpatations or dyspnœa. Yet we heard with her, a very distinct double souffle, in all the præcordial region, but especially in the region of the aorta and its orifice; a souffle quite light in the first time, but more rude and prolonged in the second; and moreover, propagating itself into the carotids, with accompaniment of bruit de diable in the right. Further, the præcordial region, covered, it is true, by quite a voluminous breast, presented nothing very notable. The pulse is remarkable for its smallness.

The developements made in the preceding case, will enable us to dispense with any lengthy statement of the reasons for our diagnosis in this. Who does not perceive, 1st, from the seat of the souffle, that there is a lesion of the aortic valves; 2nd, from its existence in the second time, that this lesion is accompanied by insufficiency of these valves? Have we at the same time any considerable hypertrophy of the heart? No! doubtless, there is nothing which leads us to admit it. Let us, then, now form our diagnosis; *medium hypertrophy of the heart, thickning and deformity of the aortic valves, from which results their insufficiency;* let us add: *without notable deformity of the bicuspid valve.* Such are, in fact, the terms of the diagnosis, which I copy exactly from my observation.

Let us see now, what we will encounter in the autopsy, which was made nine days after the patient entered.

The heart is very voluminous, but it presents externally a tolerable quantity of fat, and in the interior some blackish, flabby, unorganized concretions. Freed from these clots and washed, it weighs 11 ounces, (about 2½ ounces more than its normal weight.) The left ventricle is nearly the exclusive seat of this hypertrophy: its walls are more than ¾ inch thick towards the base. Nevertheless, the columnæ carneæ do not present a proportional development. Before opening this ventricle, water was poured into the aorta, and immediately it penetrated into the ventricular cavity. In fact the aortic valves are thickened, almost fibrous, especially at their free border, which is puffed, without adherences between them,

but a little shrunk upon themselves. The circumference of this is nearly 2¾ inches. The internal face of the aorta, above the valves, presents some rugose, unequal plaques, of a very deep yellow—rudiments of cretaceous plates.

The bicuspid valve is well formed, scarcely any thickened, or rather, presenting only some small puffs, under the form of little reddish points. The circumference of the orifice is from 3½ to 4 inches. The auricle offers nothing remarkable. The same is true of the right side of the heart, which is perfectly normal. The circumference of the pulmonary orifice is 3 inches, and that of the tricuspid orifice is from 4 to 4¼ inches. The perfect agreement which again exists here, between the diagnosis and the autopsy, has no need of being demonstrated. I will call attention only to the rugose plates which existed on the internal face of the aorta. These are causes of friction, (frottement,) and consequently of souffle, to be added to that, which the state of the aortic valves offers us. Let us take a passing notice of those small reddish points, disseminated on the borders of the bicuspid valves. I do not hesitate to consider them as so many fibrous concretions, plastic, fixed there, become adherent, living in some sort a parisitic life; and which, at a later period, would not have failed to become nuclei for cartilagenous and osseous formations, such as we are often presented with when valvular deformity has reached a high degree. In fine, let us remark the localisation of the disease in the left heart. To conclude, the orifices of this heart, (the left,) like those of the right side, have their circumference in exact proportion with the measures of the normal state established by Mr. Bouillaud.

Observation 5.—*Lesion of the Aortic Valves especially, with a cretaceous state of the Aorta.*—A porter, aged forty-eight years, of a strong constitution and sanguineous temperament, was recieved in our wards on the 27th of December, 1841. The only important peculiarity furnished by his previous history is, that in 1819, whilst serving in the cavalry, where he had been for eight years, he was kicked by a horse, on the anterior and outer region of the lower false ribs of the left side, and as a consequence was obliged to enter the hospital of Gros-Caillou. There treated by two or three applications of leeches, and as many of scarified cups; he came out at the end of two months, desiring to continue in the service, but was not able to stand the jarring necessarily consequent upon riding, being subject to palpitations and suffocation, on account of which he was discharged by Baron Larrey. Since

then, his health has been pretty good, except in 1821, when he was sick, but does not know of what disease—neither an affection of the chest nor rheumatism. Since that period, as before, his occupation has been laborious and fatiguing, and often caused him to experience, momentally, violent palpitations and dizziness.

It is on account of these latter phenomena that he came to the hospital. Fifteen days before, there had supervened a decided infiltration of the superior and inferior extremities, of the genital organs, and even of the face.

Condition upon admission.—The face still presents some remains of the aforementioned puffiness. There is no ascites. The lower limbs are infiltrated. The pulse is 68, vibrating, developed, resisting—if I may so express myself, *hypertrophied*. There is a diffuse but evident præcordial prominence—a prominence established by the cyrtometre, (an instrument of which I will speak in the article on the means of exploration,) by a difference of two degrees. The point of the heart slightly elevates the sixth intercostal space, a little without the nipple. The beats of the heart are sufficiently expansive, but deep seated; and, at this time, without vibratory tremor. Dulness on percussion for three inches vertically, and three inches four lines transversely. Throughout all the præcordial region a double bruit de souffle has completely taken the place of the normal *tic-tac*. Towards the bicuspid orifice the two souffles are short, the second sharp, the first mingling with a dull sound, caused by the shock of the soft point of the heart. The nearer we approach the aortic orifice, the more pronounced do these two souffles become; that of the second time being more marked than that of the first; both are rude, uneven, very evident in all the track of the ascending aorta, as high as the clavicles, without valvular clacking in any part of the chest. The subclavian and carotid arteries present strong pulsations, with a propagation of the double blowing sound already indicated. There is also a simple souffle, only caused by pressure, in the abdominal aorta, and in the crural arteries. The jugular veins are well dilated. There is nothing remarkable in the respiratory apparatus, except a fine mucous râle at the inferior posterior part of the left lung.

Such were the signs collected upon his arrival, and confirmed the next day by Mr. Bouillaud, who added a vibratory tremor in the carotids and subclavian arteries.

What was our diagnosis? Considerable hypertrophy of the heart, (one pound and upwards.) Thickening and defor-

mation of the left valves, with insufficiency of the aortic. Hypertrophy and chalky state of the aorta and arteries generally. Let us now endeavor to specify with care the basis of this diagnosis.

Considerable hypertrophy of the heart. Vibrating pulse. Prominence. Displacement of the point of the heart. Diffused pulsations. Augmented dulness.

Weight of the heart over one pound. Its medium normal weight is from nine to ten ounces; we have here a præcordial dulness, at least twice as extensive as ordinary; we may therefore suppose the organ at least double its natural weight. Let us add, however, that these estimates never have a mathematical accuracy, especially when the weight of the heart surpasses, as we will see in this case, the ordinary limits of hypertrophy itself. In cases of this kind, in predicting what the heart will weigh, we mean that it will at least reach that weight and may possibly exceed it.

Thickening and deformation of the left valves.—As there is no valvular clacking, the valves are not only thickened, the lesion which they always first present to us, but deformed.

Of the valves.—Why both? Because we hear no clacking either in the first or second time, but in place of it, two souffles. Nevertheless, let us remark, that this double souffle is not always a proof of duplicate valvular lesion, as the same orifice, if it be insufficient, may produce a souffle at each time. It is evident, in fact, that in this case, the normal clacking of the other orifice may be masked by the souffle of the first, however slight this souffle may be. But if it is the nature of a souffle to be louder than the valvular clacking, it is much less capable of propagating itself to a distance. If, then, the clacking is smothered by the souffle, remove your ear from the point of departure of these two sounds, and auscult above the præcordial region, (and it will sometimes be necessary to do so, as high up even as the right clavicle,) and then the clacking will resume its place, and become perceptible, because the souffle will have ceased to be heard; and as soon as you can distinguish the precise times of this clacking, you may conclude, with assurance, the corresponding valve preserves its integrity.

There is, however, a case in which this precaution itself, this verification of præcordial auscultation, by means of conducting it a greater or less distance, may leave us in default. This occurs where there is a coincident valvular lesion of the right heart, and consequently a new souffle, with the

clacking which I suppose to be normal. This additional souffle, augmenting that of the left orifice, may propagate itself so far as no longer to permit, or only at rare intervals, the normal clacking to emerge into distinctness. This morbid coincidence, to which I now refer, will, in fact, present itself in the case now under consideration. We will see by the autopsy that there existed an insufficiency of the tricuspid valve; that thus it was a cause of souffle in the first time added to that furnished by the aortic orifice, and that these two souffles, by augmenting each other, sufficed to mask completely the clacking, supposed to be normal, of the tricuspid valve. I say *supposed* to be, since so far, there is nothing to warrant us in admitting the integrity of this valve. But I will suppress this restriction by adding that, during the residence of the patient at the hospital, the normal clacking became distinct by intervals at the first time.

I perceive this peculiarity noted for the first time on the 25th of February, in the following terms, dictated at the morning visit:

Same sounds of the heart as on the first day. We finished the exploration by distinguishing the first sound on the lateral parts of the neck, and adjacent thereto. We may perhaps be surprised to see a souffle, that is to say, the effect of a constant organic cause, thus vary in its intensity. But it is a clinical fact, daily observed, and of which I will give the reasons a little farther on, when treating of the stethoscopic signs.

I have stopped to develope, to some extent, the semeiological bearing of our double souffle, and the habitual absence of valvular clacking; and yet I cannot consent to quit the subject, without having responded to an objection, which might be addressed to me. A double souffle, I have said, does not indicate disease of two orifices, unless it is double at every point where it can be heard. If there be but one orifice involved, there will be a point more or less removed from the præcordial region where the normal clacking, marked nearer its seat, will reappear. Well! ought it not to be thus in all cases where the lesion of the left heart may be single or double? For, if the normal clacking cannot be furnished by either of the two left valves, may it not be by one at least, if not by both of the two right valves? How shall we distinguish this second case from the preceding?

I acknowledge that this difficulty may be met with. I believe that it is the cause of possible error in certain cases.

But I will add, that if this cause is not impossible, it is at least not frequent, as we will ascertain in the course of these clinical studies. This variety appears to me to be owing to the fact, that the normal sounds of the right heart are probably much less striking than those of the left; and this is; without doubt, a consequence of the habitual difference in the relative force of the contractions of the two ventricles, whether in a normal or morbid state. If this be true, it is apparent that these sounds may not be sufficiently distinct to be heard beyond the acoustic sphere of the souffles of the left heart.

Let us now return to our diagnosis. We have said, *insufficiency of the aortic valves.* Why so? For the twofold reason, that the maximum of the souffle corresponds with the second time, and to the region of the aortic orifice.

Finally, we have admitted with our patient *a chalky condition and hypertrophy of the aorta and of the arteries in general.* The vibration of the pulse, the force of the beatings of the sub-clavian and the carotids, the vibratory tremor of these last, cannot permit much doubt of the existence of a hypertrophy of these vessels. As to the cretaceous state of the aorta, we may be lead to suppose it, by the intensity and rudeness of the souffle in the aortic region, a souffle very intense, truly, to be the result only of valvular insufficiency, the degree of importance of which is somewhat restricted by the development of the radial pulse. Our patient after some alternations of momentary assuagement and suffocating paroxysm, was attacked, in the month of February, by an almost general œdema, complicated by erysipelas of the inferior extremities, and albuminuria, and finally died on the 2nd of March.

Autopsy.—The heart is enormously hypertrophied. Disembarassed of its clots and washed, it weighs, with the origin of the large vessels, over one pound and a half.

Right Cavities.—The right heart participates in the hypertrophy, by which, however, the left is more particularly affected. Thus, the muscular substance of the right ventricle is firm enough and the columns quite robust. The dilated pulmonary artery, offers at its orifice a circumference of 3¾ inches, (instead of about 2¾.) Its valves otherwise sound and well formed have a depth of nearly 10 lines, (instead of 6.) The auricle is sensibly dilated, and its orifice is 6 inches, (instead of 4½,) in circumference. Moreover, its valve is sufficiently thin and well formed, but its size is not in proportion to the increased extent of the orifice which it should close;

for its maximum height is scarcely 1 inch, that is to say, 2½ lines more than usual; now the circumference of this orifice is about 2 inches too much, and the normal relation between the height of the valve and the orifice, being as 2 is to 10, it is evident that an excess, on the part of the orifice represented by 2 inches, would require on the part of the valve an increase, represented by 5 lines, and not 2½ as is here the case. The valve was then in default, that is to say, insufficient by a quantity re presented by 2½ lines.

Left Cavities.—Water poured into the aorta seemed to maintain its level, or at best to penetrate but slowly, and the aortic valves thickened, hypertrophied, and even slightly fibrous, seemed not to have been insufficient. The circumference of the aortic orifice was near 4 inches and 4 lines, (instead of 2¾ inches,) but the valves are proportionably enlarged, their height being near 10 lines, (instead of 6 or 7.) In the substance of the partition separating these from the pulmonary valves, was found a cretaceous production about twice as large as a cherry stone, difficult to enucleate, adherent to the aortic valve nearest to the pulmonary artery, leaving after its removal a little hole in the thickness of the aortic valve. Upon the inner face of the aorta, there was remarked some roughness, and even two small ulcerations, with irregular borders, from 1 to 1½ lines in diameter. In the thoracic aorta we found three small prominent yellow patches.

The left auricle was less dilated than the right. The bicuspid valve was healthy, possibly a little puffed upon its free border. A portion of this orifice having been cut, it was impossible to measure its circumference; but no matter how much it may have been developed, the valve was evidently sufficient, for its heighth varied from 10 lines to, in its maximum, even 15.

The left ventricle was essentially the seat of hypertrophy. The thickness of its walls, from the base to the point, is 1 inch.

The large arteries, and particularly the carotids and crurals, are hypertrophied; their walls, without being encrusted, are firmer and more resisting than normally. An almost perfect accordance between this autopsy and our diagnosis, is readily perceived; yet there are two points of disagreement, and especially one which I prefer to mention frankly myself. Thus the weight of the heart considerably exceeded our estimate. In reference to this matter, I will content myself by referring to the reflections which follow that estimation. A more essential point is the slight probability, or at least the

slight importance of the aortic valvular insufficiency, indicated by a souffle, rude, noisy, and much more evidently marked in the second time, than in the first. Here, I confess our error, remembering, at the same time, that we suspected the cretaceous state of the aorta, and I said that this souffle was not owing to aortic insufficiency. And I make this acknowledgment frankly, because it furnishes us, for the first time, a piece of useful information, which contributes to perfect what we have said above, on the souffle of the second time. It shows us that the souffles in the aortic region may be owing, not only, as is ordinarily the case, to the reflux of the blood into the ventricle, but also to the friction, (frottement) of the sanguineous column during its return shock, upon the inequalities with which the aorta is covered. This was the case with our patient. And who does not see that this friction is equally possible in the first time.

Further, this clinical point is so very important, that I cannot consent to pass it, without having demonstrated it by new facts, as precise as possible. We proceed then, to see the cretaceous state of the aorta expressed:

1st. By a souffle in the second time as we admitted in the preceding case.

2d. By a souffle in the first time.

3d. By a double souffle.

Observation 6.—*Souffle in the second time caused especially by a cretaceous state of the aorta.*—Fracois Laforge, sixty-five years old, laborer, was received on the 28th of February, 1842. This man complained, at his entrance, only of pretty severe epigastric pains, of three or four days duration, caused by having inadvertently swallowed a small quantity of aqua-fortis. I designedly omit the details relating to this accident, the consequences of which were fatal at the end of a month, to take up that which more especially interests us. Interrogated in reference to his previous history, our patient only said that he had suffered with an affection of the right side of the chest, fifteen years before. Since then, his health was good, but he continued to be subject to palpitations. Having reached, in our examination, the circulatory apparatus, we were first struck by the notable displacement of the apex of the heart. The finger perceived it with facility in the sixth intercostal space, a little without the mammæ, there was no increased præcordial prominence; no vibratory tremor, nor notable augmentation in the extent of the dulness. As to the sounds of the heart, a little unequal, a little less distinctly

struck, than naturally, they offered in the præcordial region, properly speaking, no perceptible souffle; but in the region of the ascending aorta, a very distinct souffle replaced the second time—a souffle very rude, and augmenting in intensity towards the superior part of the chest. Quite above the sternum, the second time itself, was accompanied by a little souffle. The pulse, not febrile, intermitted every five or six pulsations; it was but slightly developed, taking into account the very strong constitution of the subject, but it was hard and very vibrating.

With these signs before us, what ought to be our diagnosis?

In the first place we must admit that there is hypertrophy. The displacement of the apex of the heart, thrown without the nipple, and into the sixth intercostal space, is a sign in this respect, in some sort pathognomonic. But ought we to admit a considerable degree of hypertrophy? I think not in the absence of increased prominence, augmented dullness, etc. I say, then, there is a *medium hypertrophy of the heart.* Let us pursue this analysis. The sounds are unequal, less distinct than natural, but without souffle in the præcordial region; we hear them both there. At present we can say that the valves are injured, but their play is not prevented, and neither of them is sensibly insufficient. But, in the aortic region, we have two souffles, and one of them exists, especially, in the second time. This consideration causes us, in some measure, to lose sight of what we have established, in saying that *there was insufficiency of the aortic valves.* I know that we added *with a cretaceous state of the arch of the aorta;* I know that returning more than once to to this diagnosis, with the students who then followed my evening visits, I insisted, before them, on the cretaceous state of the aorta, as a predominating lesion; showing them, in support of this localization, how very positively the maximum of the souffle corresponded with the aortic region; at the same time I could not forbid myself the idea that an insufficiency of the valves themselves, also contributed to this souffle. And yet I was obliged to ask myself: if aortic insufficiency exists here to a notable degree, why is the souffle not more distinct in the region of the aortic orifice itself? Why could I not perceive it in that point during the first time? Why is the first time accompanied by a little souffle, only at a point quite above the sternum? Would not all difficulties have been avoided, if I had admitted only the cretaceous state of the aorta, as the essential cause of the souffle in

question? But it may be said, if it be thus, if the souffle of the second time has not for its principal cause, the reflux of a certain quantity of blood into the ventricle, why then this feeble development of the pulse, which is not proportionate to the constitution of the subject, or the vibrations of the radial pulsation? This peculiarity might be explained by an aneurismal dilatation of the aortic arch, and this dilatation did, in fact, exist. It is apparent that our aortic insufficiency excludes, in our diagnosis, the necessity of this explanation.

Now let us enter into the details of the post mortem examination.

Autopsy, the 31st of March, 1842.—The heart is sensibly more voluminous than natural. Freed from its clots, and washed, it weighs, with the origin of the large vessels, over seventeen ounces.

Right Heart.—The right ventricle is not dilated; it seems even relatively contracted, the maximum thickness of its walls, towards the base, is scarcely 4½ lines. The auricle is a little enlarged; the auriculo-ventricular orifice has a circumference of 5⅜ inches. Its valve is slightly thickened. Nothing notable about the pulmonary artery. The circumference of its orifice is 3⅜ inches.

Left heart.—The left ventricle is the essential seat of hypertrophy. Towards the base its walls are nearly 1 inch thick, (nearly 5 lines, more than natural). The auricle is not sensibly developed. Its thickened valve, puffed in many points, presents a transverse extent of from 3¾ to 4 inches, (9½ to 10 centimetres.)

The aorta is remarkable for the volume of its arch, which is nearly double its normal size. Water being poured into this vessel slowly penetrates into the ventricle. In fine, the valves sensibly thickened, almost fibrous on their free border, are well shaped and free in their play. The circumference of the orifice, closed by them, is 3½ inches; that of the arch, at the commencement of its curvature, is 5⅛ inches. Between these two points, and in fact, through almost its whole length, the descending aorta is notably hypertrophied, firm, and thickened, its inner face incrusted with cretaceous plates or patches so confluent towards its origin, that no space can be distinguished between them, unless there be, in this same point, some small solutions of continuity, apparently veritable ulcerations of the internal membrane.

The heart and large vessels contain some sanguineous concretions, in part formed, anterior to death.

Let us, in a few words, review some points of this autopsy. In the first place I said *medium* hypertrophy; and I must frankly acknowledge that over one pound exceeds this estimate; but I will add, that it is very rare for a hypertrophy to reach such a degree of development, with so few signs of its existence. This is an exception that it would be well to note.

Now, after the preceding details, as to the inner face of the aorta and the state of the aortic valves, we cannot doubt but that the blowing sound was caused principally, not to say essentially, by the first of these causes. So, by a species of anticipation, justified by the autopsy, I have previously said, in referring the souffle to this cause, that the rest would not offer any serious difficulty. We can readily understand how the seat of the souffle did not correspond to the orifice of the aorta, but to the arch of this vessel; and how the pulsation in the radial was so feeble, the systolic effort of the hypertrophied left ventricle being in part neutralized by the aneurismal dilatation of the aorta. Still there are two things of sufficient importance to arrest our attention. How does it happen that the souffle was stronger in the second than in the first time? How were the præcordial sounds exempt from souffle, the valves of the left heart being altered? To the first question, I can only answer by an hypothesis, that is to say, by supposing that the aortic incrustations had such a direc-tion or configuration, (that I did not notice it is true, but which is not at all impossible;) that the friction of the blood was greater as the wave returned, than when it jetted forth from the ventricle. To the second question my answer will be more formal, more solidly based upon clinical experience.

Every valvular lesion is not sufficient to produce a souffle. As we have more than once said, this sound presupposes an excess of friction, for instance, a constriction of one of the orifices. But here we have seen that the orifices were sufficiently well formed, the valves were thickened, nearly fibrous, but free in their play; consequently they fell sufficiently to form no obstacle to the exit of the blood. But, it may be asked, will valves, thickened as these are, give a normal clacking? Let us recall that, from the first day, we noticed in the præcordial region sounds unequal, and less distinctly struck, than normally. I know, however, that thickning of the valves, when no souffle is produced, does generally make itself known by a peculiar modification that we will discuss for the first time in the following case, I mean the parchment sound, (bruit de parchemin.) But this degree of sound seems to me

to require for its production a precise amount of thickening which it is impossible to determine exactly, but beyond which, the sounds gradually loose their distinctness, thus arriving by a kind of transition even to the complete effacement of all clacking, and the production of new sounds.

The case that I am now going to report, offers striking analogy to the two facts just mentioned. But independant of its diagnostic importance it affords another species of interest.

This case which I noted almost six years since, at the visit of Mr. Bouillaud will show us, that even at that epoch, the precision and aptitude of this able observer was not improvable. One can readily imagine that I should seize with avidity this occasion of paying a debt of gratitude to a master whose pupil I will ever feel proud of having been.

Observation 7.—*Souffle in the first time, especially with a cretaceous state of the ascending aorta, and the adjacent large arteries.*—George Thomas, locksmith, 48 years old, was received on the 13th of April, 1837, complaining, (especially for two months past, and without any important anterior malady, in an etiological point of view) of palpitations and panting, on the least exercise, of syncope or numbness, and of very intense headache.

Actual state on the morning visit of the 14th.—Evident prominence above and within the left nipple, prolonging itself slightly towards the superior part of the sternum. No vibratory tremor. Præcordial dulness over a space of more than 4¾ inches in diameter. Impulse of the heart moderate. The apex beats 15 lines below the nipple. In the region of the heart, the two sounds of the valves are very dry, parchment like, especially the second; a light souffle accompanies the first towards the level of the aortic orifice. In rising towards the arch, this souffle becomes more intense, like filing, and tends to become sibilant, and is followed by a dry *parchment* clacking. The same souffle extends into the sub-clavicular region of the right side; we distinguish it also on the left, but more feebly. Towards the point of the heart, and a little below, the sound of souffle ceases. Above, and within the right clavicle, we perceive pulsation sensible to the eye, and a perfectly distinct vibratory tremor. There is a dilatation of the right jugular vein; a branch goes off to anastomose with the left which is not dilated. The pulse of the two radials is sensibly the same, although perhaps a little more developed in the right; it is at sixty-four, regular, wiry, gradua-

ted and vibratory. The coats of the crural arteries, are like cartilage with some inequalities on their surfaces; their pulsations are vigorous and resisting. Under a rather strong pressure, their sound is transformed into one of very pronounced souffle; under a moderate pressure there is a jerking sensation. We feel there no vibratory tremor.

Diagnosis.—*Hypertrophy of the left heart, especially of the ventricle, with dilatation. Thickening of the valves. Dilatation of the aorta, of the brachio-cephalic trunk, of the origins of the sub-clavian and of that of the right carotid, with a cretaceous state of the arteries. General hypertrophy of the arterial system, with cartilaginous induration of the wall, particularly those of the crural.*

The same evening of his entrance, this patient, with no indication of so speedy a dissolution, complained of chills along the back, and regained his bed with considerable suffocation; and notwithstanding the aid of bleeding, died at half past 10 o'clock in the evening.

Autopsy.—Surface of the heart not covered by the lungs, is 4¾ inches transversely, and 4¼ vertically. The left ventricle, considerably hypertrophied, constitutes about seven eighths of the whole organ; its cavity is dilated, and its walls are nearly 15 lines thick at the base, and nearly 5 lines towards the point. The bicuspid valve is well formed, but thickened; the tricuspid is opaque, a little thicker than natural, and is roughened by some small tubercle like productions. The valves of the pulmonary artery are thin and normal. The aortic valves are thickened, presenting also some tubercular productions, but they are sufficient and not deformed. The aorta, covered by the lung in all its extent, is considerably dilated. Its coats are at least triple their normal thickness, and this thickening is continued along the descending aorta. On the internal face of this artery, especially towards its origin, are numerous calcareous plates; and further, in the region of the arch are some redness and rents, which we also find in the arteria innominata. This artery is also dilated, but in a less degree, as are also the sub-clavian and carotid of the right side. The thickening and cretaceous state of the arteria innominata ceases at the origin of the sub-clavian and carotid. The right radial artery is a little more developed than the left. The crurals do not present any plates on the interior, but their coats are thickened.

I ask, when we compare these necroscopic results with the details of the diagnosis, if one is not tempted to suppose that

the latter were specified after a sight of the former. I will ever remember the admiration of the assistants, and I may also say, my own astonishment at the sight of this sort of divination, to which a long experience had not then given the key, and which appeared to all of us so much more marvellous, as the diagnosis, so detailed, so precise, and so promptly proved by the necropsy, was in some fashion the impromptu of a single exploration.

I will make on this autopsy, only a very few reflections. It was in this observation that we encountered, for the first time, the dry *parchment* sound; we perceive the thickening of the valves corresponding with these sounds. A light souffle, towards the aortic orifice, accompanies the first sound. We have seen that the aortic valves were not only thickened, but also roughened by small vegetations, fibrinous rudiments, deposited there, without doubt, by the coagulation of the blood, more rare, as we have already said, on these valves, than on those to which are attached the chordæ tendineæ. But as the tricuspid valve also presents these vegetations, I may be asked why it does not also give a souffle, if not in the first time, since it was sufficient, at least, in the second? Because this souffle, if it did exist, must have been so light as to be masked by the clacking of the aortic and pulmonary valves, and moreover deeper seated, in as much as it is a souffle of the right heart, than were it one of the aortic orifice.

The farther we got from this orifice, in following the arch of the aorta, the more this blowing of the first sound predominated. Then it was in the artery, and not at its orifice, that its cause resided. But why should it not exist during the second time? Here I must make the same answer as in the preceding observation.

Here, in fine, we again find the pulse vibrating and but little developed, wiry; vibrating, because of the hypertrophy of the left heart; wiry, because of the aneurismal dilatation of the aorta. It then stands demonstrated, by this observation, that the aortic souffle of the first time may be caused by the condition of the vessel itself, rather than by the state of the valves. I have proved by the preceding observation, that the souffle of the second time can have the same cause, and consequently simulate patency of the aortic orifice. Now let us see if this same chalky state of the aorta, cannot give rise to a double bruit de souffle. The following case will teach us.

Observation 8.—*Double souffle from aneurism, and creta-*

ceous state of the thoracic aorta.—I have published in the *Revue Médicale* (May number, 1841) the detailed observation of an aneurism of the thoracic aorta, which offered this particularity, a development from before backwards, giving rise to a prominence, under the form of a double tumour in the region of the back. The entire absence of prominence, except a slight arching of the præcordial region, the increase of dulness of the heart, the obscurity of its two sounds, caused us at first to diagnosticate upon the admission of the patient, March 20th, 1838, an hypertrophy of the heart, with slight thickening of the valves without patency. A slight friction sound, believed to be pericordial, and which specially existed in the second time, caused us moreover, to suspect the existence of some plates or adhesions of the pericardium.

In a short time pain supervened in the region of the left scapula, and the examination of this part showed a pulsation that raised the fingers with force, and produced upon auscultation, a sound of collision, accompanied by a slight souffle. From that time the diagnosis could be completed, and we added: *aneurismal dilatation below the arch of the aorta, with patches (plaques) in the artery.* The tumour, the first indication of which we have just signalized, at first developed itself slowly. At the end of the first three months, it was even pressed down, as it were upon itself. At this time we heard in the heart a double bruit de souffle, dry, rasping, with its maximum in the first time, and towards the aortic orifice.

Thus it continued during the long duration of this painful affection which terminated in death on the 18th September, 1840. For my part I have often verified the existence of this double souffle, as often at the posterior part of the trunk, as in the præcordial region itself, even until, as a consequence doubtless of the thickness of the fibrous layers amassed in the interior of the aneurismal pouch, this double bruit became so obtuse, so distant, that it ceased almost entirely to be heard.

I will not here repeat the circumstantial details of the autopsy; but I will mention what is at this time for us the most essential feature of the case, that the aorta alone gave us the key to the double bruit de souffle, for it was dilated in such a remarkable way, that I caused the specimen to be moulded, and it was moreover rough, thickened, and riddled with fibro-cartilaginous, and even osseous plates. As to the heart, besides its hypertrophy, it offered no other valvular lesion than a slight thickening of the bicuspid valve, and especially of the aortic, but without deformation of these valves, or any considerable relative dilation of the corresponding orifices.

We perceive by the preceding facts, that certain lesions of the aorta, and particularly a cretaceous state of its arch, may simulate, in the stethescopic signs, some valvular lesions. It is a cause of error, of which it is well to be warned, and against which we have seen that it is not impossible to guard. A question to which we are naturally brought by this difficulty is, how shall we diagnose the cases in which valvular and aortic lesions coincide? Is this double diagnosis possible? Yes, doubtless, I avow it in advance, and besides, we have already seen it in our fifth observation. But in those cases only, when each of these lesions presents a certain degree of importance, unless there be a marked predominance of aortic lesion, the advantage in a semeiological point of view, will always be on the side of valvular lesion. This we will now proceed to demonstrate by facts.

Observation 9.—*Conincidence of valvular lesions, and a cretaceous state of the aorta.*—Lebbois Jean-Baptiste, printer, aged 47 years, entered into our service on the 14th September, 1841. The subject, for twenty years past, of rheumatic pains, generally apyretic. He had intense catarrhs, often accompanied by fever and paroxysms of dyspnœa, with palpitations, which at first separated by long intervals, gradually became more frequent, and for six months past, were reproduced by the least exercise.

Present condition.—General pallor. The face is neither puffed or discolored. Slight œdema of the inferior extremities. Cutaneous heat normal. Pulse 112, developed, vibrating, strikes forcibly. No very notable præcordial prominency. The apex of the heart perceptibly elevates the sixth intercostal space, but within the nipple. The impulsion of the organ, is moreover extended, without vibratory tremor, and the dulness is nearly 3¼ inches square. In ausculting the præcordial region, we note at first, three very distinct phenomena: a heavy and very dull sound in the first time, the result of the shock of the point of the heart; effacement of the two valvular clackings, and especially of the second; and, in fine, a souffle. In the region of the left auriculo-ventricular orifice, this souffle is little pronounced; it is distinguished especially in the first time, whilst in the region of the aortic orifice, and particularly of the ascending aorta, it exists during both times, particularly in the second. It propagates itself but feebly into the carotids. The pulsation of these arteries is very strong, are perceived in the abdominal aorta, and especially in the crurals, of which the sound gives to the ear

the sensation of a very detached fillip. No distension of the jugular veins. Nothing very notable in the respiratory apparatus, except a subcrepitant râle, very fine and numerous, behind, and at the base of both lungs.

The next morning M. Bouillaud, who had requested me to make the visit, verified what we have just indicated, without adding any thing, and left me in charge of the diagnosis. I I then dictated it in the following terms:

General and very considerable hypertrophy of the heart, (about one pound.) Thickening and induration of the left valves, and especially of the aortic, without a contraction of the corresponding orifice, or insufficiency of the bicuspid valve.

Why do I not add to this diagnosis, *insufficiency of the aortic orifice?* Because it would be contradictory to admit this insufficiency with a pulse so developed, and so forcibly struck. But from the moment that I did not attribute the souffle of the second time to this cause, was I not compelled, in order to explain it, to admit the existence of a cretaceous state of the aorta? Yes, without doubt, I confess the omission. But I go further, should I not have admitted, at the same time, both these lesions? For it appears to me, from observation, that a cretaceous state of the aorta implies, generally, a certain degree of hypertrophy of the coats of the aorta itself. Would not this hypertrophy explain those qualities of the pulse, which seemed to me incompatible with a reflux of the blood into the ventricle? Yes, if the pulse had been only vibrating—no, if the vibration was accompanied by a very considerable development; at any rate, I could reconcile these two elements of diagnosis, only by admitting an aortic insufficiency, little pronounced. It is evident that it is this same development of the pulse which leads me to exclude an aortic contraction, and bicuspid insufficiency. If this hypertrophy of the left ventricle could always explain the vigorous pulsations of the radial and carotids, there would still remain those of the abdominal aorta and the crurals, which, as we have already seen, and as we will see again, do themselves imply a certain hypertrophy of the arterial system, that I ought also to have specified. This is another omission which I will not seek to justify.

Let us return to our patient. Notwithstanding the use of digitalis, diuretics, præcordial vesication, ect., he grew gradually weaker. The infiltration increased; it affected the scrotum and penis to a degree that impeded the excretion of the urine. The pulse remained quite vibratory, but it lost its

volume. I found, at intervals, a slight vibratory tremor in the præcordial region; as to the souffle always replacing perfectly the second time, it became sensibly more contracted, constantly attaining its maximum in the region of the aortic orifice, much less distinct in that of the bicuspid orifice, and manifestly propagating itself into the carotids. The first time was quite dull and imperfectly struck, and perhaps even accompanied, towards the bicuspid region, with a little souffle. He died on the 17th of November.

This patient having been to me the object of clinical study, frequently repeated, at my afternoon visit, on the eve of the autopsy, I made before my pupils, a resumé of the diagnostic signs which we had noticed together in our last explorations, and I rectified or completed in writing, before them, my first diagnosis, thus:

General and very considerable hypertrophy of the heart, (at least about one pound;) the hypertrophy affecting, especially, the left ventricle, of which the walls must be very much thickened; medium dilatation of the auricles, and of the auriculo-ventricular orifices. Thickening and induration of the left valves. A little restraint in the play of the bicuspid valve, without any very notable insufficiency. More considerable deformation of the aortic valves, which imperfectly close their orifice, and perhaps present some small vegetations. No considerable effusion in the pericardium. Perhaps some pericardiac plates. Pulmonary œdema.

Let us show briefly, the reasons for this definite diagnosis.

Hypertrophy, etc. Displacement of the point of the heart. Expanse of impulsion and increased dulness.

The hypertrophy affecting especially the left ventricle, etc. The pulse in general, vibrating and forcibly struck. *Bruit de choc* of the point of the heart, very heavy and dull.

Medium dilatation of the auricles.—Dilatation, because 1st, generally in all cases of any considerably hypertrophy, there is a dilatation of the auricles; 2d, infiltration of the extremities, of the penis, and of the lungs, producing a stasis of the blood, which gives rise to dilatation of the auricles; these losing in contractility, what they gain in capacity; or, there may be a stasis of the blood from the contraction of the aortic orifice, or in consequence of bicuspid insufficiency; but here we would have neither; therefore, I might have added that it was especially the right auricle which was dilated. *Medium dilatation.* Because in great dilatations, the pulse is very small, and it is not so here. *And of the auriculo-ventricular orifices.*

When the auricles are dilated, the orifices ordinarily participate proportionably.

Thickening and induration of the left valves.—Effacement of the two valvular clackings.

A little restraint in the play of the bicuspid valve.—Effacement of the first sound, with a little souffle, perhaps bicuspid.

Without any notable insufficiency.—This souffle is very slight, I might even probably have attributed it to the tricuspid orifice; moreover the pulse is developed and vibrating.

More considerable deformation of the aortic valves.—The souffle attains its maximum in the aortic region, and propagates itself into the carotids.

Which imperfectly close their orifice.—Because of the souffle in the second time, by the return of the blood from the aorta into the left ventricle. I did not have, this time, so many reasons for admitting a cretaceous state of the aorta, as in my first diagnosis, but if I had made this diagnosis at first, I would have persisted in it.

And presenting, perhaps, some small vegetations.—Because there has been at intervals, a little vibratory tremor. If I had admitted cretaceous plates, I would not have made this supposition.

No considerable effusion in the pericardium.—The sounds are not distant from the ear, and there is no considerable prominence.

Perhaps some pericardial plates.—In the præcordial region, towards the base of the heart, on applying the ear, I often heard a sort of dry râle, of which I did not, at first, dare to affirm the nature and seat, supposing that it might be a bronchial râle; nevertheless, its persistance, difficult to seize, on account of the sounds of the heart, but which appeared to me independent of the respiratory movements, ended by giving grounds to suspect a pericardial friction, (frottément.)

Finally, *Pulmonary œdema.* Sub-crepitant râle towards the base of the lungs.

Let us now proceed to the autopsy.

The pericardium contains a very small quantity of serosity. On the external face of the heart, towards the middle of the heighth of the right ventricle, we remark two or three pericardial plates, forming a relief little pronounced.

The heart is considerably distended by recent clots, which especially fill the right cavities, and give to the whole organ a globular aspect. Its apex is soft and rounded. Well washed, it weighs with the origin of the large vessels, over

one pound. The hypertrophy occupies, particularly, the left ventricle, of which the walls have a thickness of about 10 lines.

The left auricle is but little or not at all dilated. Its bicuspid orifice has a circumference of 9½ lines.

The right auricle, on the contrary, is much dilated. It might contain a medium sized orange, The circumference of the tricuspid orifice is five inches, (instead of 4⅝.)

The bicuspid valve is a little thickened, but quite sufficient.

The tricuspid has its normal thickness.

The enlarged aortic orifice presents a circumference of 3½ inches, instead of 2¾.

The sigmoid valves are very thick, fibrous and insufficient; for water poured into the aorta, penetrates the ventricle. The aortic orifice is, moreover, bordered on the aortic side, and to the heighth of about 14 lines, by cretaceous plates, quite prominent, creaking under the nail, which raises them with difficulty, representing a sort of unequal, wavy ribbon; we also find some of these plates in the descending aorta.

The pulmonary artery is sound, the circumference of its orifice is nearly 3¼ inches, its valves are thin and well formed.

The right ventricle is a little dilated, and its walls are less than five lines in thickness.

The lungs present a general and decided serous engorgement, an abundant spumous serosity issuing from the surfaces of the incisions upon the slightest pressure.

I omitted assuring myself of the hypertrophy of the arterial system.

Notwithstanding this hiatus, which I regret, and the before mentioned omissions in my diagnosis, I ask every honest observer, if there are many organs in the economy, whose morbid alterations we can analyze in advance, and decompose their diseases into their different elements so minutely and with so much precision? But still some discrepances existed between our last diagnosis and the necropsy. Thus I was wrong in saying dilatation of the *auricles*, the right auricle alone being dilated. I explained the effacement of the first sound, and the slight souffle heard during the first time in the left auriculo-ventricular region, by a constraint in the play of the bicuspid valve, the autopsy showed us that this valve was free, only a little thickened; so I prefer thinking that this moderate souffle came either from a little insufficiency of the tricuspid orifice, or as is more probably the case,

from the aortic orifice, in the region of which it was so evident.

The cretaceous state of the aorta, the study of which has been the peculiar object of the last four observations, has thus led us into a kind of digression, which I am far from believing useless, but which we cannot longer pursue without losing sight of the methodical order which we wish, as much as possible, to follow in these clinical researches. So now let us recur to the properly so called lesions of the heart. We have passed in review, the alterations of its two principal orifices separately; let us now take up those cases in which the two orifices are simultaneously affected. During the study of these, out-of-the-way and unexpected clinical deductions may possibly present themselves; we will not refuse to answer to these calls, but will only do so when these sorts of digressions are authorized by the importance of the object.

Observation 10.—*Double contraction without patency of the aortic orifice.*—Sophia Boulleau, a seamstress aged 17 years, was received on the 25th of March, 1841. She dated the commencement of her disease ten months back. About that time she was seized with an acute general articular rheumatism, which confined her to her bed for nearly two months, and since then she has suffered from palpitations of the heart, which she says had their commencement during this disease. In the course of last February there was an addition of pain, with swelling of the abdomen, slight diarrhœa and cough. These last symptoms decided her to come to the hospital.

Present condition.—Pallor, anemia, and general emaciation. Considerable ascites. Heat of the skin rather greater than normal. Pulse 124, very small and readily compressed. Palpitations even in a state of repose. A little præcordial prominence expressed on the cyrtometre by a difference of about three degrees. The pulsations are strong, visible to the eye, and extend, as does the dulness, from the fifth intercostal space, almost immediately below the breast, up to the second intercostal space above, the hand there perceiving a third concussion due to the abrupt passage of the column of blood without, strictly speaking, cats purr, (fremissement cataire.) The ear applied below the breast, distinguishes a double bruit de souffle, rude and rasping, without valvular clacking; above the breast, and especially in approaching the left clavicle, we can only hear a souffle in the first time, and the second sound is then made up by a hard,

quick, and essentially parchment like clacking. The souffle of the first time is continued into the carotids unmixed, at this time, with the (bruit de diable) sound of the humming top. The beats of the left sub-clavian artery are visible to the eye. The jugular veins are sensibly developed. The respiration is rapid, difficult, without any very notable morbid bruit, except a slight moist râle, very fine, at the base of the left lung. The feet are œdematous.

The ensuing morning, the 26th, Mr. Bouillaud, verified in his turn, the preceding signs, and he dictated the following diagnosis.

General hypertrophy of the heart, (12 *to* 14 *ounces.*) *Thickening and probably vegetations with deformation of the left valves.*—Let us analyze this diagnosis and see if our antecedent observations will not permit us to add to it still some accessories.

The hypertrophy of the heart, the exageration of its weight, are too evident for it to be necessary that we should now repeat the reasons.

Thickening and probably vegetations of the valves of the left side.—Why of the *valves?* I say that this double lesion is evident. And in fact, we have in the region of the aorta, a rude blowing sound in the first time, and this sound extends into the carotids, then the aortic orifice is diseased; but in the præcordial region, properly so called, we have two souffles; whence comes the second? Is it from this same aortic orifice, patent and consequently incapable of producing a valvular clacking? No; for in approaching the clavicle we reach a point where is heard a second clacking, harsh, quick, like parchment, evidently produced by the thickened but sufficient valves of the aorta. Then the bicuspid orifice is the seat of this second souffle.

We have said that the hand perceived a rather rude concussion, which appeared to be owing to the abrupt passage of the sanguineous column? What does this concussion indicate? A prominent obstacle to the escape of the sanguineous wave through the aortic orifice. What may constitute this obstacle? Is it a simple contraction? Then we should have, in the first time, a peculiar souffle, contracted and fine. But the souffle does not present this character; it is rude and unpolished. Is it a cretaceous state of the sigmoid valves? This is possible; but generally this cretaceous state is complicated with that of the aorta; but here we probably have no plates in the aorta, since there is no souffle in the region of this

artery, that which commonly occurs. It is more likely, then, that we have some vegetations about this orifice, and perhaps, (but I give this as a mere gratuitous supposition,) about the opposite orifice.

Let us now remark that the analysis of this fact alone brings us to add to the diagnosis a new element, viz: sufficiency of the aortic valves.

What shall we say of the other orifice? Nothing positive. Nevertheless, it is probable not greatly insufficient. For, how should we then have, by the escape of the sanguineous column through the aortic orifice, that rude concussion, which moreover announces that the hypertrophy is seated especially in the left ventricle? But will it be said that the pulse is very small? With a young girl, so emaciated, this circumstance is of little importance; yet it may be a reason for supposing a little contraction of the bicuspid orifice or of the aorta itself.

But shall we say nothing here of the right heart? Yes, without doubt, with a hypertrophy so considerable; with so many signs of a notable restraint in the vernous circulation, the ascites, the distension of the jugulars, the serous congestion of the lungs, it is very probable that the right auricle is distended, if only passively, and that, on that side, we will encounter a dilatation of the auricle, and perhaps of the correspondiug orifice.

We were promptly enabled to verify our diagnosis. The infiltration progressed, then acquired an enormous volume, to such a degree, that the heart was pressed upward, until we perceived it beating in the first intercostal space, and notwithstanding two paracenteses which produced only momentary assuagement, the patient succumbed on the 18th of May.

Autopsy.—I proceed to that which concerns the heart. Freed from its clots, this organ weighs over 1¼ pounds. The hypertrophy affects the right and left cavities. The right ventricle is fully a third larger than natural; the thickness of its walls is about 5 lines in its medium part.

The tricuspid orifice is large in proportion to the ventricular cavity. The lamine of its valve are thickened and perhaps a little too short to close the dilated orifice. There are some small vegetations on the free border of this valve.

The auricle is dilated in the same proportion. Its columnæ carneæ are very strong. There is nothing very notable about the pulmonary artery.

Water poured into the aorta reflows immediately; and in

fact the three valves are well formed, of at least triple their normal thickness; but on the ventricular side of their free border, there is a train of small warts or cauliflower vegetation. The aortic orifice is small, absolutely and relatively, to the magnitude of the ventricle.

This is vast; it might contain an ordinary sized egg; its walls are 15 lines thick towards the base. The two columns of the bicuspid valve are enormous, one of them is as large as the ring finger.

This valve is very thick and hypertrophied. The orifice is quite well formed, yet, the angles of the valve are united by the agglutination of their opposite edges. All the free border of this valve is studded by many vegetations, gravelous and resembling the cauliflower. The cavity of the left auricle is dilated in proportion to the ventricle. Its walls are also thickened.

The mitral and aortic orifices are both contracted relatively to the augmented capacity of both the auricle and the ventricle.

I do not think it necessary to make any lengthy comments on this autopsy. I can but regret that the dilations were not expressed numerically. But I will say, in order to shelter from all suspicion my reputation as editor, that this autopsy, such as I have detailed it, was dictated in the ampitheatre by M. Bouillaud himself.

Observation 11.—*Deformation of the valves without Contraction.*—Joseph Doumere, shoemaker, aged 48 years, entered on the 28th of October, 1841. This patient, heretofore treated in this service, reports that although habitually healthy he was attacked nine years ago with febrile articular rheumatism, which affected all the principal articulations, and of which he was cured at the end of three months.

About twenty months since he began to experience palpitations, which gradually increased and forced him for the last nine months to discontinue his occupation. Since that epoch he has not been able to remain in bed during the night, and moreover, very frequently passing entire days in an arm-chair. During the latter months a notable infiltration, of the inferior extremities and abdomen, occurred. He had, also, during four or five months past, some symptoms of sero-sanguineous congestion of the lungs, such as a stitch in the side and very rusty expectoration, symptoms which were combatted by two bleedings, two applications of leeches, and numerous vesications.

Present condition.—Almost seated in bed, the patient is a prey to a very intense dyspnœa, his respiration being sensibly accelerated and his responses very brief. His face is pale, a little puffed; the lips slightly bluish; the abdomen is remarkable for its volume, and is a little sensible in consequence of the distension of its walls. The least shock produces the most evident fluctuations, and it is only at the distance of about one hand's breadth above the umbilicus, which is almost entirely effaced, that percussion ceases to produce a dull sound. The semi-circumference of the abdomen, passing the umbilicus, is nearly two feet. The urine is passed with much difficulty, the penis being infiltrated in all its length and twisted upon itself. The secretion is also remarkable for the infiltration of its coats. The limbs, even the superior, participate in this condition, the thighs and legs are of a considerable volume.

The pulse, difficult to feel on account of the œdema of the wrists and its smallness, is evidently disproportioned to the force of the subject, sufficiently equal, but intermittent and from 116 to 120. There are six degrees of precordial prominency by the cystometre. The point of the heart beats in the fifth intercostal space, but a little without the nipple. From this point, the pulsations extend as far as two or two and a quarter inches above the nipple, the heart being, moreover, perhaps pressed back by the abdominal effusion; they (the pulsations) are visible but in moderate force. The dullness corresponding to the region of the heart is from 2¼ to 3¼ inches vertically and from 3¼ to 4 transversely. There is no vibratory tremor. The sounds of the heart a little masked by the interposition of a lamina of the lungs, are besides imperfectly struck, without distinct clacking, and at the same time without notable souffle at this moment, nevertheless in proceeding along the ascending aorta, we distinguish in the first times, a sort of creak, very distant, and short, and which may be followed into the precordial region as far as the aortic orifice itself, but does not propagate itself in the carotids. These last arteries pulsate only very feebly. The jugulars are notably distended. In the respiratory apparatus we note a little diminution of sonority toward the base of both lungs, and a desseminated subcrepitant rale quite numerous, especially in the left.

M. Bouillaud being then absent, I dictated the following diagnosis.

Considerable hypertrophy of the heart (about 1¼ pounds). Relative and absolute dilation of the auricles. Thickenings,

deformation, and perhaps adherences of the left valves, especially without very notable absolute contraction or vegetations.— Perhaps diminution of the pulmonary orifice in particular.— Slight effusion in the pericardium. Œdema of both lungs. Ascites and ansarca.

Twelve days after, we were able to submit this diagnosis to the verification of an autopsy, the punctum which had given issue to a great quantity of fluid, having procured only a momentary assuagement. As to the sounds of the heart, they remained the same, save a little purring of the first time, which was at first only reproduced at intervals and finally entirely disappeared.

Autopsy, on the 4th of November.

Thoracic cavity. Œdema of both lungs behind and below. The heart is uncovered to the extent of about 5½ inches transversely, and from 3 inches to 3½ vertically. It contains about a glass of limpid serosity.

The heart is enormously and generally hypertrophied. Opened and washed it weighs, with the origins of the large vessels, nearly two pounds.

Right heart. Dilated so as to contain a small orange; the right auricles presents a vermillion tissue and some stout columns. The circumference of the tricuspid orifice is nearly five inches. The valve is thickened, but very well shaped, although a little adherent to the ventricle, towards its middle. The ventricle is dilated proportionally with very stout columns; its wall is about $\frac{5}{12}$ of an inch thick near the base. The orifice of the pulmonary artery has a circumference of 3⅛ inches. The valves are proportionally enlarged, but are very thin and well shaped.

The inter-ventricular partition is nearly one inch thick.

Left heart. The left auricle is rather larger than the right. The circumference of its orifice is nearly 5¼ inches. The valve is thickened; almost fibro-cartilaginous, the lamina being so approximated as to give it the appearance of a ribbon; not adherent to the ventricle, but bridled by short tendons which must incommode its play.

The ventricle, the peculiar seat of the hypertrophy, is first remarkable for the strength of its fleshy columns which are short and thick. From the base of one of them there starts a small tendinous band, very thin, which goes to insert itself upon the corresponding side of the ventricle, about 15 lines below the aortic orifice; towards the point of this insertion the endocardium, opaline in this region, presents a kind of

little plate slightly projecting, about two and a half lines in extent, and a half line thick, apparently fibrous. The wall of the ventricle is firm and ten lines in thickness; it does not commence to decrease except in the neighborhood of the point of the heart, which is soft and rounded.

Water being poured into the aorta runs over, showing that the valves are sufficient: they are thickened, however, and notably enlarged, their height is a little more than 10 lines, instead of from 6 to 7 lines, that is to say at least from 3 to 4 lines. The circumference of this orifice is about 3 inches.

Like the right heart the left contains black, soft and unorganized concretions.

Now let us compare the lesions found in the dead body with the principal assertions of our diagnosis.

I had said: *considerable hypertrophy of the heart, 1¼ pound*, we found it to weigh nearly 2 pounds. I will not repeat the general reason of this error, but I will say that here a special reason for this under-valuation, was the situation of the point of the heart, in consequence of the ventral effusion, in the fifth intercostal space, and only a little without the nipple.

Relation and absolute dilatation of the auricles. I said: the auricles are dilated not only *relatively* as regards their usual capacity with reference to that of the ventricles, but *absolutely*, that is to say, independent of that relation. The hypertrophy is general; for a long time there has existed a stasis of the blood; but we have no signs of mitral or tricuspid insufficiency; then if the blood remains long in the auricles, it is because these, being dilated, have lost their contractility.

The autopsy has confirmed this view, in showing us, it is true, a dilatation no less pronounced of the ventricles than of the auricles themselves, the former having their walls much diminished in thickness and consequently but little force in their contraction. What is a thickness of ten lines towards the base of the left ventricle of a heart weighing nearly two pounds, instead of about ¾ of a pound, when the average thickness of this ventricle is 7½ lines? This circumstance was doubtless the cause in our patient, of the moderate impulsion of the heart, the smallness of the pulse at the wrist, the imperfect beats, and consequently of the stasis of a part of the blood, all the serous infiltration that we have noted, the distension of the jugulars, the dyspnœa, &c.

Thickening, deformation and perhaps adherence of the left valves especially. Why these lesions? Because the two beats re imperfect, as we no where have the valvular clacking; we

should consequently suppose the play of the valves to be impeded; and as the absence of souffle and of vibratory tremor excludes the idea of calcareous deposit or of vegetations, then it remained as probable that there were adhesions of the valvular lamina, either with each other or with a neighboring part of the ventricle.

What in effect did we find? A tricuspid valve thickened, enlarged in proportion to the orifice, but adhering towards its middle part; a mitral valve also thickened but bridled by tendons too short, evidently insufficient for an orifice so much enlarged, (5 inches instead of about 4,) permitting in consequence a part of the blood to retrograde in the first time, as is proved by the considerable dilation of the left auricle.

If I am asked how it was that this bicuspid patency was not betrayed by a souffle in the first time, I will say the cause was doubtless in the feebleness with which the sanguineous column was expelled from the dilated left ventricle.

How did we find the arterial orifice? The aortic and especially the pulmonary valves are enlarged, and thus less adapted than in the normal state to the production of clacking.

Without absolute contraction or vegetation. I should have added, *or cretaceous deposits.* I have just remarked that the absence of souffle and of tremor put this fact beyond all doubt. The necropsy fully confirmed this point of the diagnosis.

Perhaps smallness of the pulmonary orifice. This was a pure supposition based upon a slight whining, distant from the ear, not continued into the carotids; and which I heard at two or three different times between the nipple and the sternum. The autopsy did not verify this hypothesis. I confess however, that I am not yet unconvinced that the pulmonary orifice was not the seat of this feeble and distant, but still, well heard sound, under the influence, not of a fixed lesion, but simply of some momentary and moveable obstacle; such as a small sanguineous concretion afterwards carried away by the torrent of the circulation.

Inconsiderable effusion into the pericardium. No one, I think, will object to this on account of the glass of the serum, found after death. For what is this quantity compared to the increased size of the pericardium? The point of the heart which we felt striking under our finger in the fifth intercostal space, prevented our admitting a considerable effusion, which would have been incompatible with the superficial location of this organ.

I say nothing of the pulmonary œdema.

As in the preceding observation, I will terminate this analysis by asking, if the concordance between the diagnosis and the autopsy is not sufficiently complete to prove the value of means of observation by the aid of which we can attain a like practical result?

Observation 12.—*Thickening and deformation of the left valves. Moderate diminution of the aortic orifice.* Joseph Veisin, a porter, aged 53 years, was received Aug. 20th, 1841.

This man, of a very strong constitution, and heretofore a soldier during twenty-five years, had generally, very good health. He had, nevertheless, two attacks of intermittent fever, one in 1808, and the other in 1815, each of which lasted only one month. In 1818, he appeared to have had an affection of the left lung, which continued three months, and finally in 1826, some rheumatismal pains in the arms and especially in the calves of the legs, with fever and abundant sweats. He was then treated at Val-de-Grace by cups and a bath, and left, supposed to be cured, in eight days. He said his health had been very good from that time to the present; but yet remarked that for a year past, his respiration was shorter, and that he had palpitation in ascending. These symptoms have increased during the past month especially, and to them has been added a little turgidness of the inferior extremities, which disappears in the horizontal position. He has kept his bed for three weeks, but not constantly.

Present condition. No puffing of the face. Very notable œdema of the feet, legs, and left wrist; no positive signs of ascites, pulse at 76, vibrating, especially the right, which is more developed than the left, in consequence, without doubt, of œdema of the latter.

The pulsation of the right radial are remarked in a very great extent.

A prominence of about six degrees between the left nipple and sternum.

The beatings of the heart are very greatly extended, although the point of that organ, not readily seized at first, beats only in the fifth intercostal space, and rather within than without the nipple. The hand firmly applied to the precordial region perceives a very distinct but profund vibrating tremor. The dullness appears to be only about 2½ to 3 inches square, but the presence of the lung presents a very exact determination of this matter. In the precordial region, and especially, towards the apex of the heart, we distinguish in the first time

a bruit de souffle, very contracted, and which from time to time almost simulates a whining. The second clacking is quite dull, and in its place we discover a little, but much shorter souffle. Towards the base of the organ, and in approaching the aortic orifice, the first souffle persists, but the second in becoming more pronounced, is accompanied by a very distinct clacking. Setting out from this point, if we follow an oblique line, directed towards the right clavicle, the double souffle becomes yet more marked, and its maximum appears to be about the middle of the track we have indicated. Yet there exists there neither tumors or tremor under the heart. The souffle is propagated into the carotids, these arteries beating strongly and visibly. The same is true of the subclavian: and in the right subclavian we even verify a very notable vibrating tremor. No well-marked distension of the jugular veins. Very strong pulsation of the cœliac trunk, the abdominal aorta, and the crurals, without souffle. Nothing very remarkable about the respiratory apparatus.

If the reader has attentively followed the analysis of our preceding observations, it is impossible, in our opinion, not to read, in the simple expose of the symptoms we have enumerated, and thus to speak, as through a transparent veil, the almost perfect diagnosis of our patient. Let us further seek to extract the principal features of the case, and we will afterwards see if our present diagnosis corresponds with that made at the bedside, and especially with the rigorous testimony of the autopsy.

We have noted, at first, a little partial œdema; there is then a restraint upon the venous circulation. But we have, as in the preceding case, neither general anasarca or ascites, we do not therefrom, expect a sanguineous stasis so pronounced. We cannot specify further until we shall have finished our examination.

Without any doubt, there is general and considerable hypertrophy. I think we cannot deceive ourselves much in estimating the heart at double its normal weight; let us say at from 20 to 22 ounces. But what kind of hypertrophy is it? Is it, as with the preceding patient, in some sort a passive hypertrophy, with dilation and thinning of the walls?

No, certainly, the vibration of the pulse indicates to us an active hypertrophy affecting, very probably, the left ventricle particularly. Let us come, now, to the orifices. This vibration and developement of the pulse excludes all idea of any considerable contraction of the aortic orifice, and any well pro-

nounced insufficiency of the mitral valve itself. Yet, by the application of the hand *on the precordial region*, we perceive a tremor; hence some of the valves must be injured in a high degree.

Now, what shall we say of the auscultation?

Towards the apex of the heart, that is to say in some manner, between the bicuspid and aortic orifices, there is quite a limited souffle in the first time and a much shorter one in the second; there is no clacking. To which orifice do these souffles appertain? Do they both proceed from the aortic orifice insufficiently opened and imperfectly closed? We cannot know it yet; to assure ourselves of it, let us approach our ear to that orifice. The first souffle persists and the second becomes more pronounced; but what is very singular this is now accompanied by a very distinct clacking. Whence comes this singularity? A moment since when the souffle was short there was no clacking, now it is stronger and we have valvular clacking.

The response is easy. It is, without doubt, because the two souffles of the second time, are from different origins; the first was produced at the bicuspid orifice, and however short it may have been, it sufficed, by its proximity, to veil the clacking of the aortic orifice. When we approached this last orifice this clacking was unmasked, and if it is still mingled with a souffle, and especially with a souffle stronger than that which we at first verified, it is probable that this second souffle is owing to a peculiar state of the internal face of the aorta. Let us pursue further our examination and this hypothesis will become a certainty, when in following the track of the ascending aorta, we perceive that it is, in fact, in this region that a double souffle presents its maximum of intensity.

Let us then resume and now say; *Deformation of the two left orifices, the bicuspid valve being, perhaps, insufficient* (no clacking in the first time,) *but in a feeble degree,* (development of the pulse;) *the sigmoid valves not being insufficient* (clacking of the second time); *but the orifice that they close being contracted* (whining of the first time towards the aortic orifice). Let us add: *cretaceous places in the aorta,* and, in fine, to express that which is indubitably anounced to us, by the strong pulsation of the arterial system, *hypertrophy of the principal arteries.*

Let us now see, what was our first diagnosis. It was not so perfect. M. Bouillaud being absent, I at first dictated the following at the bedside of the patient.

General and considerable hypertrophy of the heart.—Thickening and deformation of the left valves.—Hypertrophy of the principal arteries.

Afterwards determined by the persistence of the whining I added: *the principal lesion is at the aortic orifice, and it consists in a contraction.*

Let us now see what the autopsy will show. It was made on the 24th of September, the patient having died suddenly the day before.

Autopsy. No serosity in the pericardium.

The heart globular, rounded and soft at its apex, weighs with the origins of the large vessels, 24 ounces. The hypertrophy affects, especially, the left ventricle. The four cavities contain no remarkable sanguineous concretions.

Right heart. The auricle is sensibly dilated, it would contain a very large egg. It is firm and plump, and of a vermillion color on the interior.

The tricuspid valve is a little thicker than natural, but without deformation. The circumference of the orifice is nearly 4¾ inches.

The ventricle presents only a medium capacity, contracted, relating to that of the auricle. Nothing remarkable about its walls, which, even towards the base, are not five lines.

The valves of the pulmonary artery are well shaped; the orifice is nearly 3¼ inches in circumference.

Left Heart. The left auricle is dilated so as to be capable of containing a small orange.

The bicuspid orifice, which participates in this dilation, is nearly 4¼ inches in circumference, (instead of 4¼); its valve is considerably thickened, almost cartilaginous, roughened on its free edge by small vegetations, yet fleshy without cretaceous matter; the same kind of vegetations on the chordæ tendineæ which terminate in it. The columnæ corneæ are remarkable for their force and magnitude.

The ventricle is less remarkable for its dilation than for the thicknesss of its walls. These are, in fact, a little more than 15 lines towards the base, and this thickness declines only in an almost insensible manner to the apex. The tissue is firm and of a vermillion red, and recalls by its aspect the most rigorous muscles. The endocardium presents a slightly opaline tint.

The aortic orifice is manifestly contracted both relatively and absolutely; its circumference is 2¾ inches, (5 lines less than the pulmonary orifice, when normally they are about

equal.) Its valves are very notably thickened, especially toward their free border, which is rugous, a little unequal, presenting small vegetations like atheroma, or even, many of them like ostropetrous, small and more sensible to the finger than to the sight. The origin of the aorta also presents some clusters, in plates yet more prominent, of this same matter which grates under the finger when rubbed upon it; we find it as far as the middle of the descending aorta. The aorta is besides remarkable for its thickness, and all the large arteries, particularly in this hypertrophy. One of the crurals opened and placed by the side of a normal crural offers a capacity at least double.

What shall we say of this autopsy, if it is not that its history is found almost perfect in advance, in our analysis of the symptoms? We have seen, moreover in the mean time, the dilation of the auricles, and especially the left one, which is an additional reason for admitting the insufficiency of the bicuspid valve, the corresponding orifice being, besides, notably dilated (4¾ inches instead of 4¼). This dilation of the auricles, the probable but rather secondary course of sanguineous stasis, will, without doubt, explain the limited, but incontestible infiltrations, which we have noted. Yet another feature which is wanting in our analysis, is the existence of those small vegetations, which the vibratory tremor should lead us to suppose; a tremor which in fact, had no other cause unless the aortic orifice might also have contributed to it in a feeble manner. Let us again remark in reference to these small fibrineous concretions, veritable rudiments of calcareous and other concretions, that their deposition on the free border of the bicuspid valve and along the chordæ tendinæ, of this valve, seems to give us the key to their formation.

What, in truth, could be more analogous to the deposition of the fibrin of the blood on broom straws, as it occurs in our laboratories, than these curds, so delicate, agitated without ceasing in the midst of blood, which is so violently shaken by the energetic contractions of the hypertrophied ventricle.

Observation 13.—*Double contraction with bicuspid and perhaps aortic insufficiency.—Pericardiac adherencies.*

Lucien Bonde, tailor, aged 27 years, entered on the 2d of September, 1841.

This young man of a medium constitution, rather delicate and of a lymphatic temperament, was attacked at the age of nine or ten, by general acute rheumatism, which has reappeared almost every year, except the last five. At an epoch

which he could not exactly specify, but at least six years before, he began to experience palpitations and suffocations which persisted until the present time, but which put no remarkable restraint upon him until about eight months since. Since then, also, very frequent cough, and latterly there was œdematous tumefactions of the inferior extremities, then of the scrotum, and then of the abdomen. He has kept his bed for three months.

Present condition. The patient is seated on his bed. The face is pale and puffed. Considerable œdematous swelling of the feet, legs, thighs, scrotum and penis. Tumefaction of the abdomen, with a little dullness in the lower parts. The extremities are cold. The pulse is at 88, little developed and rather unequal. Three or four degrees of precordial prominence. The pulsation very deep, but extended, accompanied at intervals by a little vibratory tremor beneath the nipple. The apex of the heart strikes the fifth intercostal space, or between that space and the sixth, and the pulsations extend themselves from this point some distance above the nipple and to the neighborhood of the sternum; the precordial dullness being about 2¾ inches square. As to the sounds of the heart, instead of clackings there is only a double souffle, very rude and raspy, much more pronounced in the first time than in the second, of which the sound is almost entirely effaced; this souffle attains its maximum near the inferior hollow of the sternum. At other points we distinguish a *bruit de choc*, very heavy and dull, mingling with the souffle of the first time. No notable souffle in the carotids. These arteries, as well as the subclavian, pulsate with remarkable fervor. The jugulars are a little distended. There is a subcrepitant rale with very numerous bubbles behind, at the base on both sides.

With these signs what lesions shall we diagnosticate? I avow that, at first, this case seems more difficult of perfect analysis than the preceding. Yet, if we consider that there is an absence of valvular clacking, an absence more complete in the first than in the second, we will be brought, already, to admit a double valvular lesion, affecting especially the bicuspid valve. From this complete absence of bicuspid clacking we shall conclude besides, that there is insufficiency of this valve. As to the aortic orifice, we may perhaps hesitate in reference to its insufficiency; but, the almost, if not entire effacement of its valvular clacking will not permit us to overlook a certain degree of alteration of this valve. The vibra-

tory tremor, itself, will also indicate a pronounced alteration of an orifice; but of which? In recollecting the situation of this tremor, below rather than above the nipple, we shall have some reason to attribute it, in preference, to the bicuspid orifice.

Now, such a detailed analysis is not always possible at the bedside of a patient and under inspiration of a first examination. Such, moreover, was not the diagnosis of M. Bouillaud. That clever observer verified, in his turn, what we had noted the day before, and dictated the following:

Hypertrophy of the heart and of the principal arteries.—Induration and thickening of the left valves, with contraction of the orifices.—Suspicion of adherences to the pericardium.

Why this contraction of these orifices? Because this, or a well marked insufficiency, is necessary to explain the coincidence of a pulse so little developed and so unequal, with pulsations, in appearance, so extended; because, without doubt, the contraction appeared, to M. Bouillaud, more probable than the insufficiency, seeing the tone of the souffle, that tone of which the character could be seized only by a practical ear; because in fine, the vibratory tremor of itself, gave sufficient grounds for the diagnosis.

Finally, why suspect pericardial adherences? Because as M. Bouillaud caused us to observe, there were pulsations, very deep, extended, and restrained; because we did not find, under the hand or ear, that open exagerated play, that free impulsion of a simply hypertrophied heart. I avow that nothing less than all the habitual and consumate experience of our modern Corvisart, could have enabled one to seize these shades of diagnosis, which were, nevertheless, expressed only under the form of suspicions.

Again the verification of the autopsy was not long delayed. On the evening of the 9th of September, the patient died in a state of orthopny and general depression.

Autopsy. The pericardium contains five or six tablespoonfuls of a reddish liquid, as though bloody. The opening of this cavity on its anterior face is accomplished only with difficulty in consequence of the intimate adherences and very short filaments, which unite the pericardium to the heart, especially to its anterior and left lateral faces, adherences which it is necessary to dissect in order to expose the heart naked. In the remainder of its extent, and especially the right ventricular face, the heart presents many thick whitish plates, which we can detach only with difficulty.

The heart is considerably and generally hypertrophied. This hypertrophy effects, especially, the left ventricle and the two auricles. In the interior it contains only some soft and blackish concretions. Washed, it weighs, after some moments drying, about 1¼ pounds.

Right Heart. The auricle enormously dilated, might contain a very large orange. It is firm, fleshy and very red. The circumference of the tricuspid orifice is 4½ inches (normal). Its valve is greatly thickened, fibro-cartilaginous, especially towards its free border, and adherences to the ventricle by the extremity nearest to the pulmonary artery. The tendons which are inserted therein are stout, firm and join to some very robust and thick columns. Yet the right ventricle is but little dilated, proportionally, and its maximum thickness, which corresponds with its base, is only 5 lines.

The valves of the pulmonary artery are well shaped. The orifice is 3½ inches in circumference.

Left Heart. There is nothing very notable about the calibre or the internal face of the aorta. The valves, sensibly thickened, preserve a little transparency towards their medium part, but their free border is transformed into a cartilaginous excresence, creaking under the scalpel, hard to the finger, without ossification or notable deformation, unless these valves adhere together by their adjacent border in such a manner as to contract the opening of that orifice, which in preserving these adhesions offers a circumference of only 2½ inches.

The left ventricle is dilated and might lodge a large egg.—Its walls are thickened, firm and red; are nearly ten lines thick almost as far as the apex, which is quite soft and rounded. The columnæ corneæ are generally stout, especially those which terminate by their tendons in the bicuspid valve.

This valve, not having been cut, presents in its centre a rather oval opening nearly seven lines in extent, which, as a sort of vent hole, allows the light to penetrate to the bottom of the ventricle. This opening is, moreover, entirely circumscribed by a cluster of cretaceous matter, forming a circular series of concretions or nuclei, of which many have the volume of large peas. They are besides, unequal, very hard, rough and almost perfectly replace the valve, thus become unrecognizable, and some of them descend even like stalactites in the thickness of the tendons which are there fixed. The circumference of the auriculo-ventricular orifice, measured

without opening it, is 3½ to 3¾ inches (instead of 4½). The corresponding auricle is large enough, but rather less than the right. It is nevertheless very firm, fleshy and red.

The two lungs, and especially the left, are engaged posteriorly.

This autopsy has little need of comment. Save the hypertrophy of the arteries, which I do not find noted, and that perhaps because we omitted to seek it, the diagnosis of M. Bouillaud, is confirmed in every point; *adherences of the pericardium, contractions of the left orifices.* Let us remark, that the insufficiency of the bicuspid and the predominance of lesion of that valve are also verified. The signs which had fixed our attention on this double circumstance did not then deceive us.

I now no longer doubt, that the adherences of the aortic valvular laminæ to each other, whence resulted, in some sort, the corrugation and contraction of the corresponding orifice, may have had no other result than a certain insufficiency of these valves; and that our feeble clacking of the second sound may have been produced much less by these valves than by those more remote, but normal, of the pulmonary artery.

But shall we say nothing of the tricuspid orifice? Its circumference, which, though of the same size as in the normal state, was, in fact relatively contracted, diminished still more by the adherence of a part of its valve to the ventricle, did it not find itself by this double cause morbidly contracted, imperfectly closed with patency, which we should remember to explain, both the dilation of the right auricle and the obstacle to the venous circulation, the cause of the serous infiltrations noted above? For my part I am inclined to think so. We may, moreover, ask if it was not the tricuspid lesion which gave rise to the souffle we heard in the inferior hollow of the sternum, a region frequently indicated, and first by Laennec, as the seat of the morbid sound of the right heart. This is a question which I am content for the moment with having suggested.

Thus, then, to resume our principal morbid phenomena, *vibratory tremor;* cretaceous state of the bicuspid orifice.

Souffle of the first time: aortic narrowness, bicuspid insufficiency, and perhaps tricuspid, the two last orifices being incapable of producing clacking.

Souffle of the second time: bicuspid and tricuspid narrowness, and a little aortic insufficiency.

A little clacking in the second time: imperfect play of the aortic valves, the clacking of the pulmonary being masked by the souffle.

It now remains for me to obviate an objection. If the aortic orifice contributed to the production of the first souffle, why did the latter not propagate itself into the carotids? Because, without doubt, the sanguineous column, divided in the left ventricle between the bicuspid orifice, remaining open, and the aortic orifice, did not beat in sufficient quantity against this last orifice to cause the souffle resulting from this friction, to propagate itself as far as the carotids. This is proven by the feebleness of the pulse. And now if one should oppose to this explication, the forcible beatings of the carotids and subclavians, I would respond that this force is not always in proportion to the column of blood which traverses them; witness the localized partial pulsations of the cœliac trunk and of the carotids themselves which often occur in chlorotic persons, and which have sometimes imposed themselves as aneurismal pulsations, or which we have signalized in many cases of notable disturbance of innervation, and in the cholera itself. (See the memoir of MM. Serres and Norat on Cholera.)

Observation 14.—*Bicuspid contraction and insufficiency.—Thickening of the aortic valves.—Tricuspid insufficiency.—Pericardial adherences.*

Joseph Viard, varnisher, aged 22 years, was received the 4th of October, 1840.

This young man, of a lymphatic temperament, enjoyed good health until 18 years old, at which time he had general acute articular rheumatism, which lasted three months, and for which he was treated in this hospital. During that attack there were palpitations and very severe precordial pain. He said he recollected that in being ausculted, a bruit de souffle was heard. These last accidents detained him a month longer in the hospital, where they were met by cups and opiate cataplasms. Finally the patient was discharged cured, feeling no more, he says, either palpitations or suffocation.—At the end of two years another attack of rheumatism occurred, with yet more severe palpitations. This time it was only after a sojourn of six months that the patient was able to leave the hospital, and ever since then he remained subject to palpitations, which, for eight months, have prevented him from returning to his occupation, and to which has been added, within eight days, infiltration of the inferior extremities, the genitals and the abdomen.

Present condition.—The patient is seated, his legs suspended out of bed; they are infiltrated, especially in their inferior third, as well as the scrotum and skin of the penis. The abdominal cavity distended by a considerable effusion, gives a perfectly dull sound as far as about ten lines above the umbilicus. The face is also notably puffed, it is moreover pale and anemic; the lips are rather violet, and the extremities cold.

The pulse is at 96, small but very regular. No precordial prominency or vibratory tremor, but the impulsion is very strong and extended. The apex of the heart beats in the sixth intercostal space, a little without the nipple. The vertical dullness is about 3½ inches, and more than 3½ transversly. We hear in all the precordial region, but especially in that of the left cavities, a double souffle, rude, raspy, following the valvular sounds, prolonged, especially in the second time, and accompanied by a mixture of auriculo-metalic tinkling and a heavy, dull sound, the double result of the shock of the heart against the pectoral walls. We note, in fine, on the part of the respiratory apparatus, a subcrepitant rale, well formed behind in both lungs, especially the right.

The next day M. Bouillaud added to the preceding, that in approaching the right subclavicular region, second sound is relieved, and it is there heard very distinctly giving a slight parchment tone.

This addition is important, for it puts us in a condition to diagnosticate the disease in a manner probably complete and precise. We have a double souffle, does this alone indicate a double lesion? No! without doubt, or, if it is double, it is capable of predominating at one of the two orifices. Which is that orifice? On one side we have no very distinct souffle in the carotids; on the other, in receding from the heart we reach a point, where is found the clacking of the second time modified only in its tone. There it is the bicuspid orifice which is especially injured, and of which the valve is probably insufficient, and the diameter contracted, the aortic valves being thickened but sufficient. Fortified by the results of our anterior observations, we may add, that the extent of the serous infiltrations, induces us to admit, besides, a dilation of the right auricle (without detriment to the left) with dilation and perhaps insufficiency of the tricuspid orifice.

M. Bouillaud contented himself the first day in diagnosticating: *a general hypertrophy of this heart, with thickening*

and deformation of the left valves. Some days after, he dictated the following:

"The raspy sound, which absorbs the valvular clacking, is very rude, as if contracted in the left cavities, where we rather feel a shock, than distinguish sounds; but towards the inferior part of the sternum, the double raspy souffle becomes more pronounced and ample; it seems as though the heart were restrained in the pericardium which envelops it."

On the 22d of November, the patient succumbed. Having been prevented, by indisposition, from assisting at the autopsy, it was dictated by M. Bouillaud.

Autopsy.—The parietal fold of the pericardium adheres in all its extent to the cardiac, a circumstance which explains the restraint in the movements of the heart, which was manifested in the living subject. This adherence is very intimate and strong by means of very close cellular tissue.

The heart is gorged with clots. Hypertrophy, with dilatation of the right ventricle and auricle; the auricular columns are double their normal size. The thickened tricuspid valve forms a kind of narrow ribbon, fibro-cartilaginous, incapable of closing the orifice, which is a third larger than in the ordinary state. The pulmonary valves are sound.

Water poured into the aorta rises; the aortic valves preserving nearly their normal form, are only a little shrunken and opaque in consequence of their fibro-cartilaginous thickening. They are four times their normal thickness, and are a little red on their free border. The orifice is not notably contracted.

The left ventricle is of a volume and weight at least double that of its normal state, with dilatation of its cavity; its walls have a thickness of about 1 inch.

The two laminæ of the bicuspid valve are united at their commissure in such a manner as to form a fibro-cartilaginous ring, the lips very thick, analogous to those of the glottis, with contraction of the corresponding orifices, which very readily admits the end of the index-finger.

The internal membrane of the left auricle is thickened in all its extent, wrinkled and a little shagreened. The muscular bed is about 2½ lines thick.

In both lungs we have only to note a serous or sanguineous congestion toward the dependent parts.

It is apparent that the reflections, which the preceeding observation presented to me, are in a great part applicable to this. I therefore refer the reader to it. And in fact, we have

in this again pericardial adherences diagnosticated, or at least suspected; the contraction and bicuspid insufficiency; tricuspid insufficiency, with which, by the by, we will again see coinciding, a souffle towards the inferior hollow of the sternum; in fine, an aortic lesion without carotidian souffle. As in the preceding observation, I attribute this last anomaly to the reflux of the blood by the bicuspid orifice; I doubt not, that without this circumstance the aortic souffle would be propagated to the carotids.

Observation 15.—*Bicuspid and tricuspid contraction. Bicuspid insufficiency. Slight aortic thickening.*

Julian Choisy, keeper of a coffeehouse, aged 49 years, entered our service on the 29th of May, 1841.

Of a medium constitution and lymphatic temperament; at the age of 9 he was affected by a general articular rheumatism which lasted five or six months. At 21 there was a new attack which had the same duration. In 1826 a third attack occurred which lasted many months. Seven years ago, for the first time he experienced suffocation and palpitations, which required a great many applications of leeches to the epigastrium and several bleedings. Four years ago there was a new general rheumatism of five months duration. Since then there have been palpitations from time to time, more intense during the last five months, with dimness of sight and stupor; some cough since one month, and for a few days past a little œdema of the feet.

Present condition. Face a little pale and puffed; no ascites or œdema of the inferior extremities; heat moderate. The pulse at 80, rather unequal, quite regular, of medium developement and not vibrating.

The precordial region presents a prominency of 4 to 5 degrees by the *cystometre*. The apex of the heart beats directly below the nipple in the sixth intercostal space. We also remark some pulsations in the inferior sternal hollow. The impulsion of the heart is of a medium force, but of very notable extent, the precordial dulness being about 3 inches square. No vibrating tremor. The first sound of the heart is perfectly replaced by a raspy souffle, very contracted, recalling to mind the whining. This souffle extends into all the precordial region, but above all into the region of the left cavities, and especially the auriculo-ventricular orifice. In proportion as we ascend along the aorta, this souffle decreases and even disappears very promptly, giving place to a heavy and dull sound. It is not propagated into the carotids. As to the second sound

distinct in the precordial region itself, it consists, instead of clacking, of a very hard and heavy sound without souffle. The jugulars are a little distended. The dyspnœa is moderated by repose. We note, on the part of the respiratory apparatus, only a little sub-crepitant rale disseminated behind, especially to the left, and some small, dry creaking, probably pleural, before and above the left nipple.

The patient reports that a month since his habitual dyspnœa become so strong as to require a bleeding, and that it was accompanied by a very acute pain.

Let us now analyze these different symptoms, and we shall see to what diagnosis they will conduct us. Do we find at first, in the habitual exterior, an indication of any very considerable, obstacle to the venous circulation? We have the puffing of the face, a little distention of the jugulars, and a slight pulmonary œdema; but no ascites or infiltrations of the limbs. We ought then to suppose a certain degree of restraint to the circulation of the right heart, and as a consequence a slight dilatation of the auricle of that side; but not yet those considerable dilatations which we have seen bound, for example, to tricuspid insufficiency; rather then a little narrowness, at least relative to that orifice. The pulsation that we noted in the inferior sternal hollow, puts us in a position to think that the right ventricle participates in the hypertrophy, otherwise considerable, of the entire heart.

Let us now come to the left cavities. In the region which corresponds to them, especially in that of the bicuspid orifice, that which strikes us of course is a very rude and contracted souffle, predominating in the first time, not even encroaching sufficiently on the second time, to prevent the appreciation of the valvular clacking, which, moreover, becomes more pronounced as we approach nearer to the aortic region, but with a very hard and heavy tone.

Can we here overlook a bicuspid insufficiency with a certain degree of contraction of that orifice at the same time, and a certain thickening of the aortic valves which does not prevent this adjustment, (for they are not insufficient,) but which obscures their clacking; a thickening which may well be supposed to have some influence in the production of the souffle of the first sound; but this influence is necessarily limited, since the souffle does not extend to the carotids, the orifice being, moreover, sufficiently open to permit the column of blood feebly decreased by the bicuspid insufficiency, to produce pul-

sations at the wrist, not vibrating and rather unequal, but still sufficiently developed?

But what is the dull, dead sound along the aorta, which is by degrees disengaged in proportion as the souffle of the first time decreases? It is the imperfect clacking of the bicuspid valve, which, insufficient to some extent, has not lost all its play and to which moreover is associated the more distant, and doubtless somewhat modified, clacking of the tricuspid valve. Besides, we have no vibratory tremor; nor have we either vegetations or a cretaceous state of the orifices, nor of the aorta.

Let us give now the diagnosis dictated at the bedside of the patient by M. Bouillaud.

General hypertrophy of the heart, (18 *ounces*) *thickening, induration and deformation of the left valves, especially of the bicuspid, with the contraction of the corresponding orifice.*

The patient died the 15th of June without presenting any new local symptoms.

Autopsy. The cardiac layer of pericardium presents several plates, particularly three, one towards the base of the left ventricle, another towards the base of the right, and the third towards the summit of the left ventricle. These three plates are in more or less bold relief.

The heart is generally and considerable hypertrophied, the morbid developement affecting especially the left heart.

All its cavities contain sanguineous concretions, of which several were fibrinous before death. Disembarassed of these clots, and after having macerated in water for near five hours, the heart weighed 22 ounces. The water with which it is impregnated evidently adds to its weight.

Right heart. The auricle is sensibly dilated, sufficiently firm and vermillion in its tissue. The circumference of the tricuspid orifice is only 4 inches, instead of 4½. Its valve is thickened, and, on the side nearest the pulmonary artery, it is slightly adherent to the corresponding part of the ventricle. This is but little dilated, either absolutely or proportionally.

The maximum thickness of its walls is 5 lines. The pulmonary valves are well shaped, only a little stronger than normal. The corresponding orifice is 3¼ inches in circumference.

Left heart. Water poured into the aorta immediately overflows. The calibre of the vessel offered nothing extraordinary. We remarked only on its internal face and towards its origin some slight rudiments of cretaceous matter, not as

yet protruding notably. The sigmoid valves perfectly formed, are firm and sensibly thickened without having completely lost their transparency. The aortic orifice is 3 inches in circumference.

The left ventricle, the essential seat of the hypertrophy, is sensibly enlarged in its cavity, which could hold an egg, and thickened in its walls, which are 12 lines thick at the base and 10 lines towards the summit, which is softened and rounded. The columnæ-corneæ are proportionally robust.

The auricle is likewise sufficiently larger, its tissue is vermillion and fleshy. The circumference of its orifice is $3\frac{3}{4}$ inches, (instead of $4\frac{1}{4}$). The very much thickened valve, more than all the others, fibro-cartilaginous, creaking under the scalpel, adheres strongly to the ventricle by a part of the internal face of its free border, and especially in a third of its extent; it is then insufficient. The two columns which are inserted there, are strong and terminated by voluminous tendons.

The two lungs present a little serous engorgement at their posterior parts.

First let us remark, that I was deceived in taking for a pleural friction that which was evidently due to the patches found on the pericardium. This error had been easily avoided if the dyspnœa of the patient, though moderate, did not prevent us from obtaining a complete and slightly prolonged suspension of respiration, and especially if the morbid sound in question, partly masked by the souffle, had itself been more persisting than it was; this circumstance owing perhaps to the inequality of the ventricular contractions, was evidenced by the inequality of the pulse.

Now with exception of this inexact appreciation of an accessory phenomenon, and relatively to what concerns the orifices of the heart, has not the autopsy, in all points, confirmed the diagnosis?

We had here, too, a tricuspid lesion, and we did not notice a souffle in the inferior sternal depression; this is a negative reflection to be put in opposition with the remarks that two of our anterior facts have suggested.

Observation 16.—*Contraction of the two orifices. Bicuspid vegetations, cretaceous concretions on the aortic valves.*

Auguste Camuset, aged 16, was received, into our service on the 21st of May, 1841.

This young patient, of a delicate constitution and lymphatic temperament, has heretofore habitually enjoyed good

health. A year ago he had general articular rheumatism, which detained him in bed two or three months, and since then he has remained subject to articular pains, from time to time; and especially for three months past he has experienced, palpitations, dyspnœa and many symptoms of cerebral congestion. Finally, for some time there has been turgidness of the inferior extremities, extending even as far as the trunk.

Present condition. A little puffing of the face. Infiltration of the the feet and the inferior portions of both legs. Œdematous infiltration of the coats of the scrotum, with general swelling and transparency, which at first sight simulates hydrocele. The skin on the trunk rather warm, being 38° (centigrade) on the abdomen. The pulse is 136, very small, but quite distinct, a little vibrating and regular. General precordial prominence imperfectly circumscribed. We remark some pulsation in this region, which are propagated as far as to the inferior hollow of the sternum; those of the apex of the heart raising the sixth intercostal space a little without the nipple. These pulsations are very strong, but especially remarkable for their extent, accompanied by a sort of heavy and distant tremor, which is prolonged in the track of the ascending aorta. The dullness over the heart is about 2¼ to 3 inches square.

In applying the ear to the precordial region we are struck, and in some manner astonished, at the truly exceptional intensity of a souffle, at the same time raspy and analogous to a jet of vapor, a double souffle, extending itself equally into the right and left breast, reaching as far as to a point under the left clavicle, and ceasing to mark the second sound only under the right clavicle. It is, in fact, only at that point that we hear the clacking of the second time, a hard, dry, essentially parchment clacking analogous to a very vigorous fillip. The souffle of the first time which we again distinguish in this region is propagated, but feebly, into the carotids. These arteries, and especially the right subclavian beat with force, in a manner sensible to the eye. The jugulars are manifestly distended. No notable souffle in the cœliac trunk nor in the abdominal aorta or crurals; the sound of these last also reminds one of the sensation of a very distinct fillip. The respiration is restrained, a little plaintive, from 44 to 48. Nothing else to note in the sounds but a little disseminated subcrepitant rale.

At the visit of the next day, M. Bouillaud also verified all the preceding signs. He noted farther that the precordial souffle

extended to the distance of 2 or 2¾ inches from the pectoral walls, under the form of a slight whining, which, when we applied the ear, was effaced by the rudeness of the bruit de souffle. As on the evening before the second sound disengaged itself only towards the right clavicle, under the form of a parchment clacking, a little veiled, the first remaining masked by the souffle. Behind the chest, on both sides, the double souffle is heard with force, completely covering the two normal clackings.

From all the signs we have enumerated, let us try to form a diagnosis.

As in the preceding observation we have at first some reason to admit a stasis of the venous blood and a medium dilation of the left auricle. The left orifices are evidently both injured. A souffle so intense, and which remains double and without mixture of clacking in so great an extent, excludes the idea of an unique lesion. Yet a little clacking is heard in the second time under the right clavicle and the souffle of the first time propagates itself only feebly, into the carotids. Then, the principal seat of this enormous souffle is not in the aortic orifice, of which it seems the valves, without doubt thickened and like parchment, have not lost all clacking. We willingly admit, then, that if our two valves are insufficient, at least the bicuspid is more so than the aortic, since we find some vestiges of aortic clacking, and that of the bicuspid is nowhere encountered.

But let us remark, that in placing ourselves in certain conditions, our souffle presents a certain degree of contraction and resembles whining; then, without doubt, one of our orifices is much contracted. Which is it? We have admitted that the insufficiency, that is to say, the enlargement predominates at the bicuspid orifice; then it is to the aortic that we must especially attribute the contraction.

Finally we have a profound and as it were distant vibratory tremor, but also extending itself along the ascending aorta. This is a reason for suspecting vegetations, or a cretaceous state perhaps of both valves, but especially of the aortic.

The diagnostic of M. Bouillaud was not less detailed. It is as follows, dictated at the bedside of the patient.

General hypertrophy of the heart. Thickening, hypertrophy and probably vegetations of the left valves. Contraction of the orifices, especially relatively to the volume of the heart and to the capacity of its left cavities. Dilatation of the right auriculo-ventricular orifice, and perhaps insufficiency of its valve.

The following days the signs above noted persisted. On the 24th of May, the souffle imitated the chirping of a young chicken, mingled moreover with a raspy souffle and profound vibratory tremor.

On the 27th, the tremor was yet more pronounced, the pulse vibrating, but at the same time, very small and rather soft. The infiltration of the extremities, scrotum and abdomen made continual progress; the oppression was extreme; finally, on the 31st, the patient died.

Autopsy. The heart, freed from some clots, weighed only 10 ounces. (The heat being very elevated, one may suppose that this low figure was owing to the transudation of the fluids,) It is, nevertheless, generally hypertrophied, especially in its left cavities.

The right auricle is dilated; its valve is a little thickened, and its circumference is 4¾ inches. The maximum thickness of the walls of the right ventricle is rather more than 2½ lines.

On the contrary, the left ventricle is notably dilated, it might contain a small hen egg. Its tissue is firm and resisting. Its walls have a maximum thickness of rather more than 10 lines. Its columnæ corneæ are strong in proportion.

The bicuspid orifice presents an extent of 3¾ inches.

The valve is of a medium thickness, but we remark on its surface, and over an extent as large as a franc, a group of small vegetations, yet fibrous and strongly adherent; others, also numerous, are fixed on the tendinous cords which terminate in that valve.

The aortic orifice is small and very narrow, both absolutely and relatively to the capacity of the ventricle. Its valves are notably thickened. The two nearest the auricle give insertion to a globular mass of the volume of a large filbert, evidently composed of fibrous granulations, which are successively deposited around a central nucleus, as by a sort of organic crystalization. This mass, in which we find some grains as hard as gravel, makes a prominence of about 5 lines in the ventricle, being deposited like grafts on the ventricular face of the valves and upon their free border. There remains of these only some vestiges; they are crisped, retracted and confounded, except at their adherent border, which the mass indicated. On the aortic side we distinguish their free face, that is to say, that upon which the fibro-calcareous mass is not inserted.

I ask of all readers in good faith, save that curious aortic

concretion, which could not have been otherwise indicated but under the name of vegetations, is it possible for a diagnostic to approach more nearly a cadaveric description? Will it be said that the tricuspid orifice was not dilated, because its circumference was only 4¾ inches, i. e., 2½ lines more than the normal? But I wish it observed that the question here is of a heart of 16 years; of a heart, all hypertrophied as it is, weighing not 1¼ or 1½ pounds, but 10 ounces; of a heart, in fine, of which the right cavities are not the predominant seat of the hypertrophy; I wish it remarked that the normal relationship between the two auricular orifices, being represented by one, the difference here is 2½, so that the tricuspid is much dilated, or the bicuspid greatly contracted. I know that the tricuspid valve could not well have been insufficient, and yet I would not have been willing to answer for it; but let us remark, that this peculiarity was announced only under doubt. As to that which concerns the left orifices, their narrowness is too palpable to require remark.

And now that all the lesions of the heart are known to us, is it necessary to return to the morbid sounds that it presented, to analyze again their mechanism and the value of the signs? Who does not perceive that our double souffle had its cause at the same time in both the left orifices, that is to say, in the collision of the sanguineous wave against the bicuspid vegetations and the aortic concretions; that the cause of the whining was also in the narrowness of the bicuspid orifice, incompletely closed, perhaps, by a valve whose play was restrained by vegetations, and especially in the smallness of the passage which the state of the deformation of the aortic valves left to the sanguineous column; that the souffle of the first time, propagated itself only feebly into the carotids, because the state of the aortic valve was only one of the elements of this souffle, to the production of which, without doubt, the bicuspid orifice contributed, and perhaps even the insufficiency of the tricuspid valve; that our souffle was equal in both times, because we had, at the two orifices, two anatomical states almost identical, vegetations of one and a cretaceous state of the other, the first souffle having in part for its cause, aortic contraction, bicuspid and perhaps tricuspid insufficiency, and on the other hand, the second souffle being produced by the very probable insufficiency, at least partial, of the aortic valves, and especially by the onset of the blood against the bicuspid vegetations? Who does

not see, in fine, that if very far from the heart, we hear a little valvular clacking in the second time, that it appertains in a feeble manner to the aortic valves, perhaps yet a little moveable, and especially to the normal valves of the pulmonary artery.

But we have said enough on this observation, which, although rather more complex in appearance than any of the others, is not less susceptible of a rigorous and positive analysis.

Observation 17. — *Bicuspid contraction.—Aortic insufficiency.*

A patient aged 48 years, was received into our wards on the 8th of December, 1841. He was sent to us as having been attacked at home, about twelve days before, with a pneumonia fruitlessly treated by repeated bleedings. The examination of the patient did not fully confirm this diagnosis, and what, for us, was most positive was the fatal result of a very active treatment (5 bleedings in four days, then 25 leeches and two blisters) directed against a doubtful disease. And in effect, the patient, of a constitution otherwise deteriorated, presented to us all the characters of the most complete anemia, a general palor, extreme feebleness, respiration doubtless full rapid, difficult, plaintive, but every where the resonance was good, and nothing else notable in the way of morbid bruits, than some disseminated rales more bronchial than vesicular. As to his anterior diseases, they seemed to us to consist specially in an intermittent fever of near one year's duration, with which he was attacked in 1814, and a disease of the chest in 1821.

After the exploration of the respiratory apparatus, the results of which I have just given, we examined the circulatory system, I found the following:

The pulse 88, languid, feeble, scarcely striking the finger, unequal, and from time to time becoming almost imperceptible. The precordial dullness is fully one third more extended than normally. No vibratory tremor. The impulsion of the heart is deep seated, it beats scarcely perceptible to the touch. Consequently, the sounds themselves are very feeble, difficult to seize, the patient being able, but with difficulty, to suspend, or even to moderate his respiration. However, I distinguished at the time of his entry, and M. Bouillaud, on the following morning, with me, a souffle, double in the aortic region, unique in the left auriculo-ventricular region, existing there particularly in the second time, and slightly file-

like. At this time there was no bruit de diable (humming-top sound); but a distinct propagation of the aortic souffle.

The diagnosis of this affection of the heart is so simple that I hesitate to join it in advance.

Preoccupied by the respiratory apparatus of the patient, and justly indignant at seeing to some extent compromised his method of repeated bleedings, and a very precious method for the skillful physician, but a very dangerous one in inexpert hands, M. Bouillaud was content to dictate relatively to the heart, the following diagnosis: *organic affection of the heart, and especially of the left valves.*

For my part, as the nature of my lessons each evening obliged me to be more minute, I added the following to the diagnosis: *Deformation of the two orifices, and particularly of the aortic. Insufficiency of the aortic valves; sufficiency of the bicuspid.*

In a few words I can give the reason of this diagnosis.—We hear a souffle in the region of the aortic orifice, during the first time, and it is continued into the carotids; so the aortic orifice is incompletely open, but this souffle is likewise reproduced during the second time; then the orifice is besides incompletely closed. We hear a souffle in the bicuspid region, which souffle, single at this point, exists only during the second time; then this orifice, though it may be sufficiently closed, can be but incompletely opened. From its sound like filing, I ought to concluded that this orifice is ever decidedly contracted, and if in place of *deformation* I had said *bicuspid contraction*, my diagnosis would have perfectly agreed with the lesions found after death.

The autopsy which shows us this, took place December 12, four days after his arrival at the hospital.

Autopsy. — The lungs offer nothing notable except some old adhesions, a posterior engorgement, a little redness of the bronchial tubes, and an emphysematous state to the extent of 2 or 2⅝ inches square of the layer of the left lung nearest the precordial region. The heart is distended with clots, partly of recent formation, and in part formed anterior to death.—Disembarrassed of these clots, it weighs 21 ounces.

Right heart.—There is nothing remarkable in the pulmoary artery, its valves are healthy, and the circumference of its orifice is 3 inches.

The ventricle is a little dilated, its walls are scarcely 2½ lines thick. The auricle on the contrary, is notably dilated

—its valve is sufficiently thin; the circumference of its orifice is 5 inches.

Left heart.—The auricle is so much dilated that it could, like the other, hold a middle sized orange. The valve is sensibly thickened, but free, without adhesions, and well formed. The circumference of its orifice is only 4 inches. The walls of the ventricle, towards the base, are 10 lines thick. Besides the ventricular cavity is considerably augmented.—Largely open, this ventricle presents transversly an extent of near 8 inches (20 centemitres).

The aorta is notably dilated in its arch. It presents on its interior a rough, unequal surface, studded with chalky deposits which are prolonged even into the descending aorta. As to its valves they are thick, almost fibrous, adherent by their corresponding edges, puffed in their free edges, and finally manifestly insufficient, for water poured into the aorta immediately penetrates into the ventricle. The circumference of the aortic orifice is moreover 3¼ inches.

This autopsy fully confirms our diagnosis so far as concerns the left orifices. But it likewise furnishes two elements omitted by us, on account of the absence of the signs which we have hitherto seen to announce them, I mean the notable dilatation of the right auricle and of the corresponding orifice on the one part; on the other, the chalky state of the aorta. We conceive without difficulty that this last lesion could not have been expressed, either by a vibratory tremor, or by the intensity and rudeness of a rasping souffle prolonging itself along the tract of the aorta, for these signs pre-suppose a vigor in the contractions of the left ventricle, not compatible with the feebleness and anæmia of our subject. But how happens it that the dilatation of the right auricle had not brought on any of those serous infiltration offered by the preceding observations? I confess that this is more difficult to explain. We can conceive, however, that these two morbid elements revealed by the autopsy, have nothing incompatible with the stethescopic signs noted by us during the life of the patient. It makes only two additional conditions to add to those before mentioned as the cause of the souffles both of first and second time.

The following observation is another one of these that I collected under the dictation of M. Bouillaud, at the epoch when I commenced to follow the visits of this professor, a source fertile in clinical instruction of every nature, especially upon the subject which now occupies us.

Observation 18.—*Double insufficiency and contraction.—Cretaceous state of the bicuspid.—Adhesions of the pericardium.*

Jean Hans, a cabinet-maker, aged 28 years, was received December 13th, 1836.

This patient is of a feeble constitution, and of a sanguineo-lymphatic temperament. I find that amongst other diseases he has had two attacks of rheumatism, and a bronchial affection accompanied by spitting of blood. At the time of his entry, he was as follows:

Slight precordial prominence. Dullness over the heart for more than 5 inches, both vertically and transversely. A double souffle accompanies the two sounds, but especially the last. The first sound is a bruit de rape (sound of a rasp) sufficiently short, and particularly audible in the region of the left auriculo-ventricular orifice. The second is a prolonged bruit de souffle, analagous to a jet of steam as it escapes from a safety valve; it corresponds especially to the sternal region of the aorta. In spite of the general feebleness, pulse is a little wirey, it is regular, and of mediocre development.—There is no infiltration of the legs.

M. Bouillaud dictated the following diagnosis:

Enormous hypertrophy of the heart, with thickening and insufficiency of the left valves.

On the 28th of December, we discovered a vibratory tremor well marked below the breast, and a peculiar sound like that caused by a curry-comb, which made M. Bouillaud suppose that the pericardium was diseased.

Having gone out on the 6th of January in some measure relieved, the patient returned February 15th, attacked with an epidemic bronchitis, with some fever. The bruits de souffle of the heart are the same as heretofore. M. Bouillaud is still of the opinion that a friction of the pericardium is mingled with it.

Nothing essential was observed during the following weeks, except, at the commencement of March, a little puffings of the face, a pulse still small, disproportioned to the beats of the heart, but very distinct, and offering of itself account a little vibratory tremor. Towards the aortic orifice and the tract of the aorta, the souffle of the first time is mingled with a stifled clacking; the second souffle is unmingled and as it were by aspiration.

May 19th, we discovered a swelling of the legs, commencing to invade the thighs. The two sounds of the heart resemble a double *bruit de scie* (sound of a saw.)

22d, a double souffle is heard in the bicuspid region, and there completely covers the valvular clacking. In the region of the aortic orifice, and, on mounting towards the aorta, the souffle still predominates during the second time, the first being mixed with a little clacking.

M. Bouillaud thinks that there is *a considerable contraction of the left auriculo-ventricular orifice and insufficiency of the aortic valves.*

The following days an intense oppression set up, then puffiness of the cheeks and lips, œdema of the superior extremities, diarrhœa, and finally on the 29th of May, death supervened.

Autopsy made by M. Bouillaud.—The pericardium is uncovered to the extent of 6 inches transversely, and rather more than 6½ vertically. The parietal layer adheres throughout its whole extent to the cardiac, by fully organized and dense cellular tissue. The heart, disembarrassed of the clots which distended it, and washed, weighed 27 ounces. All of its cavities are hypertrophied and dilated.

The orifice of the pulmonary artery is free, a little dilated, its circumference is 3¾ inches. Its valves are thickened, especilly their free edges, and at their base they are opaline. The right ventricular cavity is one third larger than usual. The same is true of the corresponding auricle, the walls of which are towards the base of the ventricle 5 lines thick (instead of 1 or 1½ lines). The tricuspid valve is well formed, but of a triple thickness and fibro-cartilaginous; the circumference of the corresponding orifice is 5½ inches; neither the tricuspid nor pulmonary valve is insufficient.

Water poured into the aorta partly overflows, but some of it penetrates into the ventricle. The aortic orifice is 2¼ inches in circumference. The aortic valves become finer, form a sort of fibro-cartilaginous fold, rigid and 3½ to 4 lines in height, (in place of about 7½.)

The cavity of the left ventricle is smaller than that of the right, though rather larger than normal. Its walls towards their base are about 7 lines thick. The left ventricle is dilated and thickened; its internal membrane is opaline and composed of several layers.

The auriculo-ventricular orifice is so contracted as hardly to admit the point of the ring finger. The two plates of the valve are united so as to form a ring, and are transformed into a fibro-cartilaginous tissue. On both sides the surface is roughened by calcareous concretions and horny productions,

some of which protrude from 2½ to 3 lines, and are suspended like stalactites. On the side of the auricle the right leaf of the valve is transformed almost entirely into a calcareous concretion, friable and very hard to the touch. The valvular tendons are thickened, shortened, and the summits of their fleshy columns are themselves transformed into a tendinous tissue.

The pectoral aorta is perfectly healthy.

Is not this autopsy, in some sort, an anatomical translation or paraphrase of the diagnosis? Pericardial adherences had been suspected, and they were verified; bicuspid contraction and aortic insufficiency were announced, and both existed. I may perhaps fall into useless repetitions, but I cannot resist the desire of drawing the parallel between the physical signs and the basis.

Souffle of the first time; contraction of the aortic orifice, and bicuspid insufficiency.

Souffle of the second time; bicuspid contraction and aortic insufficiency.

In reflecting on the contraction of the two orifices, we explain without trouble, the tone of the souffles, that double saw sound, that puff of steam, that aspirant sound of the second time in the aortic region.

In reflecting on the cretaceous state of the bicuspid valve we comprehend that raspy sound, so often verified.

In the aortic region, the souffle of the first time declined, because we had then only the souffle produced by the aortic contraction, that which the bicuspid insufficiency produced being, doubtless, too feeble to reach our ear; the second, on the contrary, predominated because it was the product of both the contraction and the cretaceous state of the bicuspid, of which the sound was able to reach the ear, and of aortic insufficiency. This second souffle was strong enough to mask all clacking and did not permit us to hear that of the pulmonary valves; the first souffle, more feeble, allowed us, on the contrary, to distinguish, but distant and obscurely, the clacking of the tricuspid orifice, of which the dilated valve was not insufficient.

Finally from our anterior observations, save the last, the infiltration that we had noted during life gave us reason to expect a notable dilatation of the right auricle and this lesion was not in default.

OBSERVATION 19.—*Clots in the heart. Considerable dilata-*

tion of the right heart. Aortic vegetations. Bicuspid contractions.

Bouillon, 41 years old, brewer's servant, was received on the 2d of March, 1838.

He is of a strong constitution, heretofore in good health, and declares that he has never had any other maladies than three attacks of rheumatism, of which the last, and the gravest, occurred eighteen months since.

Eleven months ago he experienced dyspnœa and palpitations for the first time, Nine months since a little swelling of the feet occurred, now disappearing and anon recuring, until during the last two months it has become permanent. For some days past he has been a prey to a very pronounced dyspnœa. He has had many attacks of faintings with complete loss of consciousness.

Present condition. The patient is seated on the edge of his bed, his legs pendent and supported on a chair. The respiration is panting 40 to 44. The face is pale and little livid; the lips large and bluish; the eyes prominent; the jugulars distended, especially in expiration; the inferior extremities strongly infiltrated and rather cold.

The precordial region, more prominent than the opposite one, is overrun by some venous branches which are not observed on the latter. The beatings of the heart are much more extended than natural, but embarrassed as if the organ was confined to a narrow compass. The point of the heart is felt 2⅜ to 2¾ inches below the nipple, and quite without, so as to be transverse. The dullness is 4¾ inches vertically and about 6¼ transversely. The hand feels a slight tremor.

In the region of the left cavities a double rasp or saw sound replaces, perfectly, the valvular tic-tac, and extends into all the precordial region and the environs. The souffle is stronger and more prolonged in the first time. The pulse is small, very difficult to feel on the left side, more distant on the right, irregular, unequal and intermittent. We count from 124 to 128 pulsations, of which some escape by their smallness; others are a little vibrating. The pulsations of the heart seem to be less unequal and irregular than those of the pulses.

In view of all these morbid phenomena, M. Bouillaud diagnosticates; *Enormous hypertrophy of the heart. Thickening, induration and insufficiency especially of the left valves.—Clots in the heart.*

After the detailed diagnosis of our preceding observations

the reader may, perhaps, be surprised at not finding the same precision in the terms of this. The last element of this diagnosis is, nevertheless, of such a nature as to explain fully this absence of localization to all who are in the habit of auscultating the heart. And, in fact, when the blood concretes in the interior of its cavities, there often results no less disorder in the sounds of the organ, whether normal or morbid, than derangement of its functions.

Now, since it is the first time that the occasion has offered us an opportunity to particularize the symptoms of these sanguineous concretions, let us say, in a few words, what determined M. Bouillaud to admit them here.

Let us remark, first, that this patient presents to us the most intense orthopnœa that we may have yet encountered. This anhelation, this anxious countenance, this distension of the jugulars; all these signs, in fine, of a considerable restraint in the venous circulation and especially the long duration of all these morbid phenomena, the prolongation of this stasis of the venous blood, is there not already great reason to suppose, the blood being checked in its course, that the coagulation must be an imperious necessity? But let us come to some more formal indication. These indications are furnished to us by the restraint in the movements of the heart, movements extended, but which, according to M. Bouillaud, seem yet in a narrow compass; the inequalities and irregularity of these pulsations; and finally the characters of the pulse, generally small, sometimes imperceptible, at others, on the contrary, almost vibrating, more unequal and irregular than the heart itself. Then must there be, between the radial pulsation and the impulsion of the left ventricle, independently of the organic lesion of the valves themselves, some other obstacle, sometimes fixed, but often moveable, breaking and intercepting more or less completely the effort of the sanguineous wave.

Such are, in fact, the principal signs of clots in the heart; signs very important to be known, for they may give us a key to functional disorders, which without them we would not know how to explain; and at the same time, moreover, suggest to us an active and energetic medication, as powerful against these temporary disorders as powerless against the organic lesions properly so called.

Let us now return to our patient.

The following days a little amelioration declared itself under the influence of a bleeding and digitalis, but the infiltration made new progress; the scrotum and the penis became

œdematous; the cavity of the peritoneum filled with serum; the pulse remained small and even more and more imperceptible; the sounds of the heart, always accompanied by a double souffle, became heavier and more smothered; the dyspnœa reappeared, so violent and frightful, that the patient, almost erect on his bed, demanded to be strangled rather than be left to suffer thus; finally, on the 27th of March, death came to put an end to this frightful agony.

Autopsy. The pericardium is uncovered to an extent of 7 inches transversely. It contains about the fourth of a glass of turbid serosity. The heart, of which the point is turned almost directly to the left, is distended so much as to present the appearance of a calf's heart. These clots are, in part, soft and discolored—half organized. Freed from these concretions, the heart, with the origins of the large vessels, weighs nearly 25 ounces.

The right ventricle is dilated so as to be capable of containing the fist. It is hypertrophied in proportion to its dilatation. The parietes are, in their maximum thickness, about 5 lines.

The right auricle is dilated and thickened nearly in the same proportion. The tricuspid orifice has a circumference of nearly 6½ inches. The valve moreover presents its normal conformation. It is thickened, hypertrophied, nearly sufficient.

The valves of the pulmonary artery are thin, larger than natural. The circumference of the orifice is over 4 inches.

The left ventricle is dilated so as to contain a duck egg. Its parietes are about 9 lines thick, and, what is very remarkable, they are much less firm and of a less lively red than the parietes of the right ventricle.

Water poured into the aorta approximates the valves and does not penetrate into the ventricle. These valves are quite well shaped and thickened; their free border is strewed with small granular vegetations, looking to the ventricular cavity, organized under the fever of venereal warts. The circumference of this orifice is 3½ inches. The mitral valve offers a very considerable thickness and is transformed into a fibro-cartilaginous tissue. The orifice that circumscribes this valve is contracted so as to admit the extremities of two fingers. Its circumference is 3½ inches. On the auricular side the thickened valve forces a sort of wrinkled fold, like the skin, about the anus. The borders, where the tendons are inserted, present small vegetations, but less numerous.

The parietes of the left auricle are thickened in the same proportion as the corresponding ventricle; its internal membrane offers rather an areolar aspect, and is a little thickened.

The reflections we have heretofore made will free us from the necessity of comment on this autopsy. We comprehend, without trouble, that without the clots of which we have specified the effect, it would not have been less possible here than in our previous observations to perceive that narrowness, so notable, of the bicuspid orifice, and these vegetations of the aortic valves; the cause of the vibratory tremor, and their insufficiency, and perhaps even that insufficiency and that enormous dilatation of the tricuspid orifice and of the corresponding auricle, coinciding again here with a considerable infiltration and with œdema of the lungs, that I also see noted in the autopsy of which I have thought it my duty to reproduce only so much as related to the heart.

We perceive in this fact an example of fixed sanguineous concretions, if I may be allowed thus to speak, persisting and surviving the subject. In the following observations we will encounter those of a temporary character. This is one of the reasons why I think it proper to add it to the preceding cases.

Observation 20.—*Temporary Clots. Contraction and a little bicuspid insufficiency. Slight aortic thickening.*

Frederic Piquois, founder, aged 36, entered our service 23d December, 1841.

This patient, of quite a strong constitution and lymphatic temperament, says he has habitually enjoyed good health. He is only subject, since eight or ten years, to headache and giddiness. During the past year there has been added a cough, suffocation in ascending, œdema, which at first limited itself to the left jaw, and attacked afterwards the superior extremities, then the inferior of the same side, and since six weeks the right inferior extremity, and finally vomiting which has become more frequent during the last few weeks. All these symptoms have obliged him to cease from his occupation for six months, and even several times to keep his bed.

Present condition. The face, the trunk itself, the fore-arm, the left wrist, and the two inferior extremities are swollen and doughy to the touch. The inferior extremities, in particular, preserve deeply the impress of the finger. The skin is moreover of a dull tint generally. Some nausea at intervals. The epigastrium and abdomen indolent. No pain in the renal region. Urine scarce. The penis a little œdematous. Heat of the skin little raised. The pulse rapid, unequal, scarcely

seizable at 120 to 124, contrasting by its smallness with the force of the subject. The precordial region presents a prominence of about four degrees, but the pectoral parietes, of the left side especially, are a little infiltrated. In consequence of this circumstance, without doubt, it is difficult to find the point of the heart, and its beatings are irregular. We nevertheless finally succeeded in perceiving them in the sixthint ercostal space, from 10 to 15 lines without the nipple. The pulsations of the heart are scarcely felt by the hand firmly pressed over it, and there is no appearance of vibratory tremor. The dullness has a vertical extent of about three inches and 3½ transversely. In ausculting the sounds of the heart we remark that the first seems to be effaced, whilst the second is drier than natural. In the origin of the aortic orifice and the aorta this contrast is at its maximum, the second sound being then especially hard and like parchment. In the region of the auriculo-ventricular orifice the same absence of the first clacking, the clearness of the second being less sensible, and besides, especially at intervals, a little souffle, quite rude, mingling itself sometimes with the first, at others, with the second sounds. This souffle is not propagated into the carotids, nor is there any *visible* distension of the jugulars. The respiration is embarrassed and with difficulty limited to 28 per minute. There is only a slight sub-crepitant rale in the inferior and posterior part of the left side.

The next day M. Bouillaud verified the following:

The pulse is at 124, felt with great difficulty, but is tense and without notable irregularity at this moment. As yesterday, the point of the heart is felt quite obscurely in the sixth intercostal space, a little without the nipple, and the first clacking is superceded by a souffle. The second is rude, of a slight parchment tone, and at present without souffle. The souffle disappears as we recede from the left auriculo-venticular orifice, and, towards the clavicle, is heard a single sound corresponding to the second time.

M. Bouillaud dictated then the following diagnosis:

Very considerable hypertrophy of the heart (about 1¼ pounds). Induration and thickening of the left valves, with deformation of the bicuspid and contraction of the corresponding orifice.

Evidently, in making the diagnosis, M. Bouillaud takes into consideration both that which I had verified the day before and what he himself observed. The first clacking was superceded by a souffle, growing feeble as we receded from the bicuspid

orifice; then there was deformation of the bicuspid valve, and even a little insufficiency. In this same region there existed no souffle at the moment, but I had verified it the evening before; then there might be a certain degree of contraction of that orifice, a lesion which coexists so often with the deformation and insufficiency of a valve.

Is this diagnostic definition, and does it give the key to all the symptoms observed? No, doubtless.

The dyspnœa, the general infiltration, the irregularity of the pulsations, observed at least at intervals, the smallness and especially the rapidity of the pulse (124) indicated certainly a notable obstacle to the venous circulation. But what was that obstacle? Perhaps a right ventricular lesion, but possibly also some sanguineous concretions. Certain ulterior signs ought to decide this question. Let us remark, moreover, that this anasarca of our patient had not followed its usual march. It appeared to have begun at the face and reached the inferior extremities only in the later periods. Was this not a reason for making the inquiry, whether there had not existed, as a complication of the disease of the heart, and as an essential cause of the serous infiltration of the extremities and trunk, that affection of the kidneys, called the *disease of Bright?* Under this impression M. Bouillaud directed the patient to preserve his urine.

The next day it was found pale, opaque, slightly acid, a little frothy, nitric acid and heat producing a white precipitate nearly of the consistency of the syrup *orgeat.* The patient had vomited several times.

We add to the diagnostic: *albuminuria.*

These morbid phenomena, and especially the vomitings, persisted almost constantly until the death of the patient, which event they doubtless hastened. But the sounds of the heart presented an important modification, which should be noted.

On the 30th and especially on the 31st of December, and consequently a few days after the entrance, M. Bouillaud, in ausculting the precordial region, was much astonished to find the two sounds of the heart quite distinct, especially the second, always resounding and of a slight parchment tone, the second being only a little rude; further, there was none, or only a slight and soft souffle in the first time, particularly in the aortic region. The apex of the heart is thrown into the fifth intercostal space. There is no oppression in a state of repose. The swelling of the extremities has diminished.

Finally let us add, for this is essential, that the pulse has fallen to 60.

I repeat, that this last fact is of the highest importance; for it no more permits us to doubt that at the entrance of the patient, the pathological phenomena, that we have indicated above, were caused by clots of blood which produced, among others, this triple effect:

1st. To distend the heart sufficiently to cause its point to descend to the sixth intercostal space.

2d. To restrain the valvular play, so as to suppress the clacking of the bicuspid valve, much more submitted to their contact than the aortic valves, in consequence of its conformation and of its more central position.

3d. To produce on the part of the ventricular contractions and consequently in the sanguineous wave itself, an exagerated quickness, a condition so favorable, perhaps almost essential here, to the excess of friction (frottement) which all species of bruit de souffle presuppose.

M. Bouillaud now completes the diagnosis by this last feature.

A probability of temporary polypi-like concretions in the cavities of the heart.

But we may be asked, perhaps, if these clots are once admitted as the cause of the morbid phenomena noted during the first days, and which have, in fact, disappeared since, what will become of our first diagnosis relative to the bicuspid and aortic valves?

I respond, we will still maintain that diagnostic. And why? Because if it be true that the souffles have disappeared, save that of the first time, which rigorously speaking may, perhaps be considered a souffle of anemia, it is not less true that the valvular sounds have not rebecome normal.

The first sound is yet a little rude and the second has a parchment tone; then the corresponding valves are not sound. Do we desire yet new proof of this, which will triumphantly demonstrate the validity of our preceding considerations? I find it in the course of this observation.

February 14th. The swelling has made new progress; the pulse has attained 92; and we find a very distinct raspy souffle in the first time.

February 23d. There is considerable infiltration, even ascites for some time past; pulse 88; the raspy souffle persists.

Further, in order to arrive, finally, at a still more positive

demonstration, let us now seek, in the necroscopic lesions the proof of our diagnostic.

The preceding reflections will allow me to content myself with their exposition, without comment. It will be readily perceived, that our diagnosis was correct in all points.

Our patient died on the 4th of March.

Autopsy. Considerable infiltration of the extremities and trunk.

Thoracic cavities. Very notable serous engorgement of both lungs and especially of the left.

The heart is hypertrophied, but to a medium extent. It weighs, with the origins of the large vessels, nearly 17 ounces; the hypertrophy particularly involves the left ventricle.

Neither the pulmonary or tricuspid orifices, nor the right ventricle offer any thing special.

The left ventricle is enlarged; and its parietes present, from the base almost to the apex, a thickness of 9 lines. Its columnæ-corneæ, sufficiently robust, are inserted, by rather short tendons, into the bicuspid valve, which is sensibly puffed at its free border, and which appears a little shrunken and narrower than natural. In fact the circumference of the corresponding orifice is only $3\frac{3}{4}$ inches (instead of $4\frac{1}{4}$).

The circumference of the aortic orifice is $3\frac{1}{8}$ inches; its valves are quite well-formed and sufficient, (which is proven by pouring water into the vessel.) They present only a sort of small fibrous patch towards their base; and, above their free border the internal membrane of the aorta presents a line, almost circular, of a nankin yellow, which divides, more by its color than by its feeble relief, the smooth and polished surface of the arterial tunic.

Abdominal cavities. Both kidneys are remarkably small; they resemble those of an infant. Their vertical diameter is 4 inches, and the semi-circumference, taken from the middle of their convex edge to the center of the fissure, is $2\frac{1}{2}$ inches. They are equal in weight. United together with their fibrous capsule and a portion of the ureters 4 or 5 inches long, they weigh about half a pound. They present nothing remarkable interiorly, but on their exterior they are granular, red, and in many points adherent to their capsules which cannot be removed without rupturing. The alteration indicated, occupies in some manner, only the superfices of the

organs, which at the depth of half a line resumes its normal texture.

The ureters and bladder are remarkably pale. The urine contained in the bladder was collected with care and treated with nitric acid, and there resulted a very abundant white precipitate.

Let us now finish this analysis, perhaps already too far extended, by a last observation interesting, less on account of the anatomical lesions, the same as those we have already seen very often, than even the existence of a symptom that we have not yet encountered, the triple and quadruple sound. We see, moreover, death produced by a clot in the heart. This is a new feature in the history of that morbid product; and also a point of contact between it and the cases we are about to relate.

This observation is one of those, which I collected under the dictation of M. Bouillaud before I entered his service.

Observation 21.—*Contracted, insufficient and calcareous condition of the bicuspid valve. Hypertrophy of the left auricle. Triple sound. Death by a clot.*

Garret, a butler, aged 38, was received into our service on the 4th of January, 1838.

He has rather a delicate constitution, and a lymphatico-nervous temperament. Heretofore, usually in good health, he has complained of palpitations only since about one year; and no antecedents appear to account sufficiently for the invasion of an organic disease of the heart. The articulation of the left shoulder is in a semi-anchylosed condition, with a cicatrix towards the middle of the arm, which seems to have been the conseqnence of a violent phlegmonous inflammation, that occured at the age of 12 or 13 years. The entire limb is a little atrophied. The patient himself attributes the palpitations of his heart to an influence which lasted five weeks.

Present condition. (Noted by M. Bouillaud). The face exhibites lassitude and is pale as well as all the remainder of the skin. There exists neither œdema of the extremities, ascites, or dilation of the jugulars. The pulse is rather small, but distinct and regular, at 56–60. No very distinct prominency. The apex of the heart strikes the sixth intercostal space and forcibly repels the finger. In all the precordial region, properly speaking, that is to say, from the base of the heart to its apex, we percive great vibratory tremor. The corresponding dulness is 4½ inches vertically and 5 transversly. The valvular sounds are replaced by a double souffle;

the second more prolonged than the first, is accompanied by a sort of scraping, or snoring, similar to that attendant on sleep. In ascending along the track of the aorta this double souffle is heard but without mingling with the snoring alluded to. Further, there is about the heart an amphoric tinkling which is heard at a distance, and is analogous to the sound of boiling water. Receeding from the precordial region, the double bruit de souffle ceases to be heard and the amphoric sound disappears. The double souffle propagates itself to the posterior part of the left side of the chest. There is no vibratory tremor in the arteries. Respiration is perfect.

M. Bouillaud dictated the following diagnostic:

General hypertrophy of the heart (about one pound). Thickening and induration of the left valves, with a contraction of the auriculo-ventricular orifice.

The next day a very distinct triple sound is heard in the precordial region which may be traced as far as to the right side of the chest. This is the result of a decomposition of the second sound, and is accompanied by the souffle already noted.

The amphoric sound of the previous evening is no longer distinguished. The pulse is only 48–52; it is always tense and vibrating and not increased.

During the following days, there is persistence of the triple sound which is even more and more distinct. The two last sounds do not occupy more time than the first, which is synchronous with the pulse. The last is always made up by a souffle. In the track of the aorta there exists only the usual double sound.

January 23d. The triple sound extends into the carotid. Under the influence of digitalis the pulse has fallen to 32. During the examination the patient was restless, and, a few moments after, M. Bouillaud discovered four sounds, which were soon superseded by the usual triple sound.

The 31st. The triple sound persists ever with a raspy souffle which ends it. It may be represented by tic- - - - tac - - - - s-s-s-s. M. Bouillaud made some remarks on this subject, and explained the third sound by saying that, without doubt, the left auricle emptied itself through a contracted orifice, when the ventricular diastole was already accomplished. This morning, the pulse has risen to 48. The patient is affected by very intense salivation which he has contracted by murcurial frictions on the pubis. February 4th. He died at the

moment of our visit; no signs had foreshadowed this sudden death.

Previous to developing the results of the autopsy, let us for a moment, review some of the peculiarities of the symptomatological history of this patient.

Is it necessary to state the grounds for the diagnosis? With this double souffle, so rude, that it is accompanied by a vibratory tremor evidently located in the region of the heart itself, so strong, that it propagates itself as far as to the posterior part of the chest, and that the valvular clacking can nowhere be heard; who does not perceive, as a consequence, that both orifices are affected, or, if only one, that it is injured in a very high degree? If now we consider that the rudest of these souffles, which is mingled with a sort of scraping, does not offer this accompaniment along the track of the aorta, ought we not to conclude that this bicuspid orifice is the point of departure of this morbid sound? Finally, since this sound is heard in the second time, should we not conclude also that the lesion of this orifice is especially a contraction?

In reference to the amphoric tinkling noted only on the first day, had it any relationship with the lesion which we are about to diagnosticate? Was it, for example, a phenomenon of the same nature as the vibratory tremor? I do not think so. I prefer to view it as a peculiar sound, of which I will speak with some minuteness hereafter, which, although studied in other regions, has not, to our knowledge, been discribed as existing in the precordial. I allude to the *bruit rotatoire*.* I am justified in this idea by the description dictated to us by M. Bouillaud, without pronouncing on its cause, and especially by its feeble propagation beyond the precordial region, and finally, its prompt disappearance.

One word now on the triple sound of which this observation offers us the first example. We will speak hereafter, of the different interpretations, of which this curious modification in the rhythm of the sound of the heart, is susceptible. Let us remark here that on which M. Bouillaud dwelt, and which we will presently see fully sustained by the autopsy; and let us note this peculiarity that, for the triple sound to be heard, the succession of the sounds of the heart must probably present a certain degree of slowness, since it did not exist on

* A sound attendant on the first sound of the heart, and so called because it was thought to resemble the rumbling of distant wheels. It has also been attributed to muscular contraction, and is hence sometimes termed *bruit musculaire.—Translators.*

the first day when the pulse was 56–60, and became perceptible the next day, the pulse being at 48, and that afterwards it appeared to become more and more distinct as the pulse gradually diminished in frequency. May this not explain why we have not before encountered this triple sound in cases so anatomically analagous to the present? For if I am not deceived, no case has presented a similar slowness of pulse.

Finally, let us come to the recapitulation of the cadaveric lesions.

Autopsy, (25 hours after death.) The pericardium is exposed to the extent of about 5 inches square.

The heart, lying almost transversely, is nearly triple its normal volume, depending in part on the distension of its cavities, especially of the auricles, by sanguineous concretions. In fact, on dividing the vessels of the base of the heart, an enormous quantity of half coagulated blood was discharged from the auricle, and this evacuation reduced the volume of the heart at least one-third.

The right auricle still retained an unctious looking clot, of a yellow amber color, of the size of an egg, prolonging itself into the right ventricle, where it is one-half less. M. Bouillaud believes this clot to have been the immediate cause of death. Freed from all its concretions, the heart weighed, with the origins of the large vessels, about 14 ounces.

Right heart. The valves of the pulmonary artery are thin, large and well formed. The circumference of this orifice is 4 inches. The cavity of the right ventricle is dilated to a medium extent; its parietes are less than 5 lines in thickness.

The right auricle is dilated, and might contain a large egg; but its parietes are of a good thickness at every point, its columnæ-corneæ well developed and hypertrophied. The tricuspid orifice has a circumference of 6 inches. The valve preserves its normal shape; it is evidently enlarged and a little opaque.

Left Heart. The aortic valves are sufficient, well formed, a little hypertrophied, especially at the middle of their free border, and of a tint rather opaque and lactescent. The circumference of the aortic orifice is nearly 4 inches.

The cavity of the ventricle is but slightly or not at all dilated.

The bicuspid orifice is transformed into an oval aperture, capable of admitting the end of the little finger, and of which the large diameter is nearly 10 lines, and that of the small

rather more than 5. The two laminæ of the valve, adhere by their angles, and circumscribe the orifice. They are thick and fibro-cartilaginous. At the posterior part, they are more than 5 lines thick, and in consequence of the presence of a calcareous concretion, as seen from the auricle, it is divided into two valves so as somewhat to resemble a shell. The edges are rugose and unequal, made up of calcareous granulations. The columnæ-corneæ, which are inserted into the valve, are strong and their tendons hypertrophied. The summit of these columns are transformed into tendinous substance. The endocardium adjacent to the valve is thickened, and changed into a fibrous tissue. It is unequal and resembles shagreen. Separated at its circumference, the valve weighs 180 grains.

The auricle is so much dilated as to be capable of containing a goose egg. Its parieties are generally thickened (1½ lines) the result of the hypertrophy of the muscular tunic, which is of a deep red. The endocardium is easily detached, and is nearly double its normal thickness.

The origin of the aorta is slightly dilated, and sown with spots of yellowish white, without calcareous incrustations. At certain points we remark a pale red color. This same color is also observed, and it is even more marked on the aortic valves.

There exists no traces of cadaveric imbibition.

This autopsy agrees so well with its semeiology and with the diagnosis, that it cannot suggest any very numerous reflections.

There is perhaps but a single point which demands our consideration: viz: the very considerable dilatation of the right auricle, coincident here with the complete absence of any notable infiltration. Is this fact calculated to invalidate our antecedent observations? I think not; and why? Because here we have not only a dilatation of this auricle, but also a proportionable hypertrophy of the muscular tissue; the tricuspid orifice is adequately enlarged and closed by a well formed valve; finally, the right ventricle is not dilated, and the pulmonary orifice itself is quite free; all, circumstances but little favorable to that stasis of the venous blood which is the cause of infiltration. In our antecedent observations we had what may be termed a passive dilatation; here, we have in some manner a veritable active aneurism, probably the result of that inflammation of which we have found so many scattered vestiges, in the thickening of the endocardium, the

redness of the aorta and in the amber colored and fibrous concretions, the formation of which must have been promoted by the stomatitis of our patient; aided, moreover, as it undoubtedly was, by that obstacle, so evident, to the arterial circulation, located at the bicuspid orifice, the approximate, if not the only cause of the dilatation of the left auricle, and the influence of which was gradually extended to the right heart, the obstructions in which, as we have seen, appear to have produced the asphyxia of the patient.

Here ends the first part of this memoir; the exposition of facts. I might readily add to this list, many facts not less authentic than the preceding. But I am fearful of fatiguing my reader and of falling into wearisome repetitions. I think I have exhibited almost complete, all the chief alterations, or at least the most common that the heart can present, and afterwards sufficiently demonstrated, by cadaveric examinations, the possibility in all cases, of a positive and exact diagnosis. Have we not seen, in almost all, as perfect agreement between the diagnosis and the autopsy, and, when there has been an omission, or even an error on our part, have we not frankly confessed it, in such a manner as to promote the interest of the science—an error clearly pointed out, being the best precept for avoiding future mistakes of a similar character?

Let us now recur to all these facts in order to unfold and to study successively the means of explanation, by the aid of which we have succeeded in analyzing, so minutely, diseases heretofore reputed as impenetrable. But, before we approach this didactic part of our subject, let us take a general glance at the divers lesions which we have enumerated, and see if this view of the ensemble will not give rise to some considerations which have not yet occurred to us.

And, first, let us observe the wonderful difference in the frequency, and especially in the gravity of the affections of the pericardiums and those of the heart itself. Of our twenty cases, there is not an example of open acute pericarditis, or of considerable effusion in the envelope of the heart, capable, of itself, of producing a fatal termination. I have followed, for nearly six years, the clinic of M. Bouillaud, and during all that time I have observed, only five or six times, the complication here alluded to. I have not cited these facts because my object here was to study the heart itself, rather than its serous envelope, of which the symptomatological history is well known, and because, under the aspect of the subject which occupied our

attention, these facts could not have added any thing essential to our observations.

If, as I have just remarked, the grave lesions of the pericardium are very rare, the same is not true of latent lesions which are revealed to us at the autopsy in the form of slight and circumscribed adherences or small, prominent and isolated plates. These, if I may be allowed the expression, are almost necessary accessories of grave lesions of the heart, and which, in our necropsies, have rarely been in default, although we may have generally passed them in silence, except when these adherences, or false membranes were of such a character, as to become themselves causes of functional disturbances, or give rise to a suspicion of their existence by certain palpable signs, as in our observations 9, 13, 14 and 18.

Let us now come to the heart, properly speaking. The first remark by which we must be struck, is the singular predominance of the left over the right heart, in respect to its morbid alterations.

True, we have often seen the right heart participate in the hypertrophy of the left; but has there not always been a difference between the two, sufficiently marked to render it apparent that the hypertrophy of the left heart had been the capital and primitive lesion, and that of the right only accessory and secondary? Have we not encountered valvular alterations almost exclusively in the left heart, those in the right consisting, most frequently, only in a passive enlargement of the orifices, especially that of the tricuspid?

What can be the cause of a difference, so decided, between two cavities bordering on each other, and which are so analogous in their structure? It can be owing only to the difference in the qualities of the blood which traverses them respectively. Approximating each other anatomically, the right and left cavities are very far removed from each other in physiological point of view.

They differ as widely, in this respect, as arterial and venous blood. Relative to the pathogeny of the affections, which engage our attention, I rank myself, without hesitation, by the side of M. Bouillaud; the inflammation of the internal membrane of the heart, the sanguineous congestion of the different parts of this organ, and I will add the molecular composition of the blood which flows through it, appear to me to be the essential points of departure of the structural alterations which the muscular tissue and the valves present to us.

There is, nevertheless, still another circumstance, which

should enter into the account, in studying the anatomo-pathology of the centre of circulation. This circumstance, secondary, it is true, and which always presupposes some other previous morbid condition, is the force of the blood in the interior and on the walls of the cavities of the heart—an effort of dilation altogether mechanical, and from which results the enlargement of its cavities and their orifices, but which, "it is well understood, does not exclude, for the explication of what has been termed eccentric hypertrophy," an exaggerated nutrition submitted fortuitously, perhaps, in the pathological growth of the organ, to the same laws as in its normal evolution, that is to say, having simultaneously augmented its substance and enlarged its capacity.

This mechanical dilation occurs, especially, in those partial enlargements which either of the cavities or orifices may present to us, beyond which is the free flow of the sanguineous wave finds itself more or less completely intercepted. I have said, that the right heart offers those passive alterations, if I may be permitted thus to designate them, more frequently than the left. One word now on the mechanism of their formation.

If it were common to encounter an organic lesion of the pulmonary artery, and a contraction of the corresponding orifice, we should readily conceive that, behind this obstacle, the right ventricle and the auricle itself must become dilated. But as we may determine for ourselves, by the facts that we have passed in review, this lesion of the pulmonary valves is of very rare occurrence. And yet we have very often witnessed a dilation of the right cavities. Why? because, according to M. Bouillaud, an obstacle, situated in the left cavities, gradually exerts on the circulation of the right, an influence which, though distant, is not less sure and real. Let us develope this idea by giving it the support of an example.

A lesion exists at the orifice of the aorta. This lesion arrests or at least, impedes the passage of the blood projected by the left ventricle. A portion of this blood remains then in the ventricle and becomes an obstacle to the ingress of that which should be received from the auricle of the same side. This auricle in its turn retaining a part of the blood in reserve, the pulmonary veins, which there terminate, are, for the same reason, only imperfectly emptied; as a consequence, the same must be true of the pulmonary parenchyma which sustains them. If this parenchyma remains thus charged with a quantity of blood, which should have passed freely

forward, it cannot receive all the venous blood, which the ramifications of the pulmonary artery conveys to it, and hence, retrograding in its turn, the venous wave must distend, successively, the pulmonary artery, the right ventricle, the auricle of the same side, and eventually the entire venous system, from which soon result serous infiltrations, sometimes partial, at others general.

Let us remember, that by duly considering the extent or the importance of the serous effusions, that we have, more than once, diagnosticated dilations of the right heart, and especially of the auricle, diagnosis afterwards verified by the autopsy. Let us add, that if at the beginning of this arrestation of the venous circulation, the right ventricle can redouble its efforts, and, by this excess of the muscular contraction, cause the palpitations and dyspnœa of which the afflicted complain at this period; if it contributes then without doubt to hypertrophy its tissue, a moment may, nevertheless, arrive, when its dilation will be such, that having lost in contractile force what it may have gained in capacity, the feebleness and impotency of its contractions will become a new cause of stasis of the blood, added to those we have already pointed out, and strengthened, moreover, by another morbid circumstance, of which I have not yet said any thing, and which is the result of the dilation of the right cavities: I allude to insufficiency of the tricuspid valve, which we have proven many times after death, and even anounced its existence during life.

Thus, then, to sum up what concerns the right heart according to our observations: most frequently, I will not say constantly, eccentric hypertrophy, passive dilation, and often simple hypertrophy, that is to say, without any very notable valvular lesions, constitute its anatomo-pathological history.

In the left heart, on the contrary, hypertrophy, without valvular lesions, is almost an anomaly. We have cited one example of it, (Observ. 1st,)and yet in that case we could only perceive that the valves were not perfectly round. As in the right heart, so here, the auricular orifice is most frequently injured or the lesion predominates at this orifice when there are conincident aortic lesions. More then once we have shown the probable reason of this predominance in the influence, which the chordæ tendineæ, that are inserted in the bicuspid valve, may exert on the coagulation and deposition of the fibrin of the arterial blood. As in the

right heart, we often meet with partial dilations, sometimes of the ventricle, at others of the auricle; but we have less frequently found the orifices free or dilated in the left than in the right heart. The contraction of these orifices is certainly one of the most common lesions which we have observed, whether there existed concomitant insufficiency or not. As, apropos, may I not refer to that peculiarity, curious, perhaps, to those who believe in final causes, that by the arrangement even of the morbid lesions which the two hearts present to us, and of which we have spoken, it seems that nature may have, in some manner, endowed herself, by a great foresight, so that the fatal term, inevitable sooner or later as a consequence of the disease, might be, at least as much as possible, procrastinated? I will explain myself.

Of all the mortal perils which may result from hypertrophy of the heart and lesions of the valves, there are two principal ones—an afflux of too large a quantity of blood to the brain, producing apoplexy, and too great a diminution of the quantity sent to the lungs, causing asphyxia. I repeat that such as they usually present themselves, the lesions of the orifices seem to be, at least, as favorable as possible to the prevention of this double accident.

Thus the right orifices, which lead to the lungs, are, as we have seen, almost always free and open. Thus, also, are not the left orifices which open towards the brain, most generally contracted or insufficient; so that, as a consequence, there is an imperfect issue of the sanguineous column at the first time, through the contracted aortic orifice; or a division of that column itself by a reflux movement, sometimes into the auricle in the first time, and at others into the ventricle in the second time.

I repeat it, this peculiarity is, in my opinion, a curious and fortuitous occurrence, rather than a precaution of nature, a vestige of order in the midst of disorder; but I dwell upon the fact, in passing from this motive only—that the fact should not be entirely neglected, in relation to prognosis, and in a general study of the diseases of the heart.

Let us now begin the examination of our means of exploration, not for the purpose of composing here a complete treatise on diagnosis, but especially to indicate the practical views which the clinical facts themselves, that we have analyzed, may suggest.

SECOND PART.

A succinct consideration of the means of Diagnosis in diseases of the Heart.

The first sign which we have remarked almost constantly in advance of those of which the ensemble constituted our symptomatological history, was the state of the pulse. There is, as we know, two things to study in the pulse; quantity and quality. It is generally essential to note the quantity only in the acute affections, pericarditis, endocarditis, &c. In those cases the pulse may attain an extreme quickness—it has surpassed 130 and 140. The twenty cases related above have not furnished one of this kind.

I will refer only to the fact of sanguineous concretions (Obs. 19) in which the heart beat 124 times per minute, as if to compensate, by the multiplicity of its contractions, for the insufficiency of each of them. In those cases then, there was generally nothing remarkable about the pulse in this first point of view. But this is not the case in reference to its qualities.

The qualities of the pulse should, doubtless, be properly estimated in the acute disease, and most especially in the chronic affections of the center of the circulation. Let us remember that more than once, the pulse has been the first index we have had of an affection of the heart, and has awakened within us a suspicion, transformed by the subsequent examination, into a certainty. We have sometimes seen a vibrating, developed, and resisting pulse immediately announce to us (see Obs. 5. and others) the existence of an hypertrophy of the heart and particularly of the left ventricle; and from this development of the pulse we have been led to conclude that there was apparently neither pronounced contraction of the orifices, nor very considerable valvular insufficiency, and far less a great hypertrophy of the arterial system. Sometimes the opposite characters have caused us to foretell oppo-

site lesions. Almost always we have been able to discern a perfect accordance between the state of the pulse and that of the heart; it seemed that the first was but the echo of the second. We have, however, sometimes noticed between the two signs a discordance which became of itself a new sign, announcing, for instance, the presence of some obstacle between the ventricular contraction and the radial pulsation. (Obs. 19.)

Have the qualities of the pulse been modified in all of our cases? No, unquestionably not: and it is well to be aware of this practical truth, that, if certain disorders of the pulse correspond often to certain lesions of the heart, it is no less true that the absence of these first does not necessarly suppose the absence of the second. With some of our patients the pulse remained regular up to the last moment. This brings us to the reflection, that if the ancients—deprived, it is true, of such positive physical signs as more modern times and other methods of examination have furnished us—considered the pulse as truly the compass of the observer in the study which now occupies us; that if Corvisart himself thought proper to develop with so much pains and so minutely all the indications of the pulse, we must acknowledge that the progress of science has not sanctioned, in every respect, their confidence and their praise. Who is there at the present time would dare to diagnosticate a lesion of the heart, on account only of the intermissions or irregularities of the pulse? Deceptive characters which may coincide with lesions purely dynamic or nervous.

I know that it has, notwithstanding, been pretended that these signs were capable of specializing the lesion of such, or such of the orifices, or such valve, and that thus an irregular, unequal, small, intermittent pulse, announced an aortic rather than a bicuspid contraction. A rapid glance at our different patients will show us that this law, which in some cases may be true, is at least not without exception.

In our twenty-one cases, the pulse has been found more or less unequal and intermittent, only seven times, viz: in the following cases.

Hypertrophy without very notable valvular lesion (Obs. 1.) Pulse of medium developement, unequal, intermittent and irregular.

Medium hypertrophy. Thickening of the valves. Cretaceous state of the aorta (Obs. 6.) Pulse intermittent, little developed, but hard and vibrating.

Considerable hypertrophy. Deformation of the valves. Bicuspid insufficiency. (Obs. 11.) Pulse sufficiently equal, but intermittent and disproportioned to the force of the subject.

Double contraction with biscuspid insufficiency and perhaps aortic. Pericardiac adherences. (Obs. 13.) Pulse rather unequal and little developed.

Bicuspid and tricuspid contraction. Bicuspid insufficiency. Slight aortic thickening. (Obs. 15.) Pulse sufficiently regular, but rather unequal, of medium developement and not vibrating.

Dilatation of the right heart. Aortic vegetations. Bicuspid contraction. Clots in the heart. (Obs. 19.) Pulse small, unequal, intermittent and irregular.

Narrowness and a little bicuspid insufficiency. Slight aortic thickening. Clots in the heart. (Obs. 20.) Pulse rapid, very small and unequal.

Do we not perceive, as a consequence, the intermittence or inequality of the pulse coexisting with the most diversified lesions, from simple hypertrophy to the most complex valvular alterations and sanguineous concretions in the interior of the heart? and as we may be asked if, at least in the seven cases that we have cited, there was not a necessary relationship between the organic lesions and the characteristics of the pulse, we may add that in the remaining fourteen the pulse is noted as preserving its regularity. I will cite in particular among them, the bicuspid insufficiency (Obs. 2), thickening of the aortic valves without insufficiency (Obs. 3), the same lesion with insufficiency (Obs. 4), contraction of the two orifices, with vegetations of the bicuspid valve and a cretaceous state of the aortic valves (Obs. 16), etc.

We must then recognize the pulse as a useful auxiliary, important even in the study of the lesions of the heart; but we should not on this account exaggerate its importance and expect from it information which it cannot furnish, and thus accord to it a degree of confidence, to which other more precise methods may be able to challenge a just title.

I will, nevertheless, make an exception in favor of one quality of the pulse, of which I have yet said nothing; I allude to the vibratory tremor, which the sanguineous wave sometimes presents to us, and that more frequently, it is true, in the arteries adjacent to the heart, than in those more distant. This quality of the pulse coincides very frequently with the causes of the purring tremor (fremissement catoire,) in general; or, even in particular with a contraction of the aortic orifice. (See especially our observations 5, 12 and 18.)

Let us pursue our rational exploration. We have noted the pulse of our patient; let us now uncover his chest and examine the precordial region. I designedly say *examine*, for a simple view will furnish us with more than one sign. These signs are *prominency, displacement of the point of the heart*, and the *pulsations* of this organ.

Prominence of the precordial region is not always a morbid phenomenon. With certain individuals the left mammary region is more developed and prominent than the right, and this anomaly may have been congenital or produced by the oft repeated exercise of the muscles of that side, as for instance occurs with left handed persons. Again, a precordial prominency may owe its existence to a deviation of the spinal column; we perceive, for example, that under the influence of a deviation of this column in which the convexity is thrown forward and to the left, the precordial region must become prominent. But if it be true that this prominence is, in certain cases, without symptomatological value, there is no reason to conclude that it is always so. Almost constantly in pretty extensive hypertrophies of the heart, and in hydro-pericarditis, the more or less circumscribed elevation of the precordial region is an incontestible pathological phenomenon, susceptible even, although rarely, in the course of certain acute maladies of the centre of circulation, of presenting like precordial dullness itself, a sort of augmentation and decline, appreciable during a very short lapse of time.

This precordial prominence, sometimes easily perceived at first sight, is not always so evident. In order to be able, not only to verify its existence in doubtful cases, but also to measure the degree of it, I have caused M. Charriere to construct a small and very simple instrument, which I have called *cyrtometre*. It is a plate of steel, surmounted, on its middle part, by a graduated scale, along which a slide glides, with two blades, parrallel to the plate of brass, and fixed to a certain extent. It is understood that this instrument can verify a precordial prominence only on condition of a previous application to the right mammary region, varying its application to many points, and taking great care, in the these different applications, to employ equal pressure.

By the aid of these precautions, the cyrtometre has always appeared to me to fulfill its object properly. Moreover, the precordial region which first suggested the idea of that instrument to me, is not the only point to which it may be applied,

for wherever it may be of practical interest to measure a limited pathological prominence, the cyrtometre may be usefully applied.

Displacement of the point of the heart. Some observers have said that the point of the heart beats, normally, about 1½ inches below the nipple. This localization, true in a good number of cases, does often fail in fact; and why? The mamma is susceptible of very extended congenital transposition, especially in a vertical direction. I have seen the point of the heart at a distance almost double that indicated, the organ being perfectly sound. If we desire to adopt the nipple as the mark, let us take it rather as a lateral limit, and we may then say that the point of the heart beats between the nipple and sternum, nearer to the former, than to the latter: but let us add, as an essential localization, and almost infallible, *in the fifth intercostal space.* This is so exactly true that many years of close observation have not furnished me with a single exception to the rule, and although I have sometimes had reason to suspect the existence of an organic affection of the heart, which nothing caused me to anticipate but that the apex of the heart presented itself more without, or lower than the point I have indicated.

Let us remark that, in the organic affections proper to the heart, it is in both directions or only in one that the displacement occurs. In other cases the morbid lesion is generally seated elsewhere. Thus I have seen pleural effusions of the left side press the heart even into the right mammary region. I have also seen abdominal tympanetes or ascites, elevate it as high as the second intercostal space; and that, even, notwithstanding the coexistence of a considerable hypertrophy of the organ, of which our 10th observation has furnished us an example.

Let us add, in fine, that we do not always see the movements of the apex of the heart, and that frequently it is only by a strong pressure of the finger that we are able to perceive them.

This reflection is not less applicable to the third sign, of which we are about to speak, and which I have indicated as capable of being presented to us by an inspection of the precordial region. I allude to the pulsations of the heart itself.

With an emaciated subject, and with whom under the influence of any cause whatever, the contractions of the heart are accelerated, we will see the precordial region elevated, not only by the point, but also, although more feebly, by the base

of that organ. This elevation may be more or less abrupt and strongly pronounced; but, save in morbid cases, it will be little extended, generally circumscribed in a surface of from $2\frac{1}{2}$ to $3\frac{1}{3}$ inches square, at most. In organic affections, on the contrary, these pulsations may be much more extended; they may possibly be felt to an extent almost double; they may even propagate themselves by means of the diaphragm, to the pit of the stomach, at the same time that their impulsion raises abruptly and visibly the stethescope, or even the head of the observer. The extent of these pulsations is here the principal fact; their force is only a secondary consideration; this impulsion, unless it exceeds certain limits, which practice teaches us to recognize, being compatible with the physiological condition. Every one knows, in fact, under the influence of rapid movement, the heart *beats strong*, as it is vulgarly termed, but it does not beat on this account with a proportionably augmented extent. These expanded pulsations constitute then a morbid phenomenon, and I can say, that they characterize essentially, a peculiar state of the heart—hypertrophy. The same is true of the preceding signs. As for these, besides the existence of this last sign, (expanded pulsations,) it is not so necessary in hypertrophy that its absence must immediately exclude the idea of an affection which its presence characterizes. This sign may fail more or less perfectly, and that in consequence of the embonpoint of the patient, or of the coincidence of some other affection, such as effusion, either pleural or pericardiac; or even in consequence of the feeble degree of the hypertrophy or the limited energy of the ventricular contractions, enfeebled by the progress of the malady or the medication employed to combat it.

May I also say that if hypertrophy of the heart is characterized by the extent and vigor of the pulsations, that the absence or slight degree of energy of these, may be owing to an opposite condition, that is to say, atrophy, a condition very rare, and which the preceding observations have not presented us an instance; this condition of the heart, contrary to hypertrophy, existing most frequently above, and even supposing, almost necessarily, the absence of all valvular lesion?

Finally, when it is by the application of the hand that we appreciate the pulsations of the heart, a special peculiarity may offer itself to our observation; I allude to a certain sensation of restraint, or embarrassment, in the ventricular con-

tractions, a sensation difficult to describe, and which, I confess, requires for its perception a high degree of practice, but which expresses then, to the experienced hand, the existence of pericardiac *bridles*, or adherences, which obstruct the movements of the heart. I will refer, in support of this remark, to our 13th observation in particular.

If the anormal extent of the pulsations of the heart, in the strongest marked cases, may sometimes conceal itself from our sight, or escape the perception of the hand, there is another mode of exploration from which hypertrophy cannot, in general, remain latent; I allude to percussion.

Normally, the *dullness* which corresponds to the presence of the heart is from 1½ to 2½ inches square, when this dullness exists. I add this reserve; for very often, percussion, the most cleverly practiced, will not encounter a dull sound in the precordial region; it may be that the stomach distended with gas, makes, by the clearness of its resource, the obscurity of the sound that you seek; or, that which is most common, a portion of the lung may interpose before the heart, and of sufficient thickness to produce the same effect. In morbid cases, on the contrary, and especially in rather notable cases of hypertrophy of the heart, percussion not only verifies, but also measures, and that often with mathematical precision, the enlargement of the organ. There is but a small number of clinical facts where this mode of exploration has been in default; and we have seen in two cases, among others, how exactly its teachings may conform to the results of the autopsy (see observations 7 and 21). We have seen that it was especially this anormal dullness which served as data for estimating the weight of the heart, a secondary part of the diagnosis, yet often confirmed after death. The limits of this dullness have varied in our observations between the normal, and 6 inches in one of its diameters, (Obs. 19.) Generally it is in the transverse diameter that we have found the extent of the dullness most considerable.

Up to the present, and in all that which preceeds, we see only some signs of hypertrophy. Let us come now to some more profound lesions. And first, if we always suppose that one of our hands is applied on the region of the heart, a new sign may yet present itself then to our observation. I allude to *vibratory tremor*.

This phenomenon, signalized for the first time, by Corvisart, supposes necessarilly, or at least most generally, as well as most of the morbid sounds of which we will speak presently, two conditions;

1st. A certain degree of quickness and of volume in the sanguineous wave, and as a consequence a certain force in the ventricular contractions.

2d. An obstruction, more or less powerful, which imperfectly checks the passage of the blood and augments the collision of its particles. Let us remark, in anticipation, that we will find these two same elements in all our bruits de souffle. Thus then if it is not true that all souffle supposes necessarily a vibratory tremor, it is incontestible, on the other hand, that all vibratory tremor necessarily supposes a bruit de souffle.

Vibratory tremor is not a rare phenomenon. In our twenty-one cases, we have encountered it six times (Obs. 12, 13, 16, 18, 19, 21). If now we inquire, what are the lesions with which it coexists,we will perceive that in our observations, they were constantly either fleshy vegetations or concretions at one of the left orifices, or more frequently at both.

M. Bouillaud says that there have been some inexplicable cases of vibratory tremor of the heart without organic lesion. If, in this respect, the sign of which we have just spoken can sometimes be equivocal, it will not be thus with those whose history I am now about to commence, or rather, resume, and which is entirely auscultatory.

Sounds of the Heart.—The stethescopic minutiæ into which we entered, in relating each individual case, and the summary considerations with which we have prefaced our exposition of facts, might perhaps excuse us from the performance of our remaining task. I believe, however, that the collecting at present, of all that these practical reflections may offer of a general character; that the gathering together of these disseminate traits, and uniting them in a table which resumes them, or which may develop, will be adding to these diagnostic studies, a useful at least, if not a necessary compliment, the clinical interest of which may cause to be forgotten our repetitions and vicious composition.

I divide into six principal categories, the diverse sounds perceived by our ear when we auscult a heart. These sounds are *normal*, *super-normal*, *sub-normal*, *modified*, *replaced*, or *accompanied*. Let us rapidly run over these six divisions.

1st Division.—*Normal sounds of the heart.*—I will not here repeat all that I said at the commencement of this work, upon the four causes which seem to me to contribute to the production of these sounds; upon the predominance of valvular

clacking which our clinical studies have since so fully demonstrated; upon the anatomical reason for the first sound being deeper and longer, and the second, clearer and shorter, etc. I will only recall that of these two sounds; the first is heard in its maximum below, and a little without the nipple, and the second above and within, at the same time acknowledging that this difference is often more easily seized in the morbid than in the normal state; and I will advise the student who desires to improve himself in the diagnosis of the diseases of the heart, to auscult carefully, and for a long time healthy hearts before ausculting diseased ones. Indeed, one would scarcely believe that the normal heart could be susceptible of slight differences so various and so difficult to describe, and how much the knowledge of these various differences afterwards, facilitates the study of anormal sounds.

One word more, before quitting the normal condition, or a stethoscopic peculiarity which I have not seen pointed out anywhere, of which I think it is well to be warned.

It has happened to me, rarely it is true, only three times during my two years of *clinique*, to hear at the moment when I applied my ear to the precordial region, a confused buzzing sound, which at first, I did not know how to explain, when, after having continued so long that I thought it my duty to note it in my observations, it disappeared gradually and did not return. This buzzing appeared to me to be a rumbling sound, (*bruit rotatoire*) resulting probably from some febrile contractions of the pectoral muscles; and in fact, the third time that I encountered it (it was in a patient attacked by apyretic gastro-intestinal embarrassment) after having uselessly essayed the interposition of the stethescope, the suspension of respiration, etc., I caused the patient to be seated at ease on the bed, the arms supported, and almost immediately the sound ceased, to reappear no more, and permitting me then to distinguish the sounds of the heart, which were perfectly normal. Of my other two patients, one was affected by a cerebral hemorrhage, in process of resorption, the other was a woman with a mixture of hemorrhage and softening of the left hemisphere, with partial meningitis. I inquired of myself if the rigidity and contraction of the left superior extremity was not a reason for supposing some analogous and profound contraction of the precordial muscles. But it was not long before I perceived that this was not a valid hypothesis, when I discovered the rigidity of the arm persisting and my

rotatory sound disappearing. It would be useless to say that at the autopsy I found nothing special about the heart.

Besides the three facts that I have cited, there was another example of the same sound in our observation 21 (see above). I have specified it in this instance, however, only with doubt, having been simply editor of that observation which dates, as the reader may perceive, at an epoch much anterior to that of my entrance into the service.

But I have said enough, I think, of a phenomenon essentially accessory. Let us come now to the morbid sounds, properly so called.

2d Division.—Sounds *super-normal.*—The sounds of the heart may surpass the normal state, if I may thus express myself, in relation to their clearness, their fullness and force; in a word, they may be clearer or fuller than normally.

The exaggeration in the clearness of these sounds has not always a very positive clinical value. It may be owing to the thickness of the pectoral parietes, or to the proximity of the stomach distended with gas, as is very often observed with chlorotic girls. Sometimes, however, it is caused by a dilatation of the cavities of the heart, especially if this dilatation, coincide with emaciation of the parietes (passive aneurism of Corvisart) a rare lesion, considered as coexisting with that complete absence of valvular deformation, that the sound of which we speak, suppose. It is more common in a heart organically affected, for one of these sounds only to present us this character of clearness, and then most frequently it is the second. We conceive that this last being naturally the smallest of the two, however little the first sound may be observed pathologically, by this fact alone, the contrast between them will become sufficiently striking to astonish our ear.

The *stronger and well struck* sounds, as they are sometimes termed, are not incompatible with the physiological condition, or at least with the absence of all organic lesion. As a consequence of rapid motion, in some cases palpitation, purely nervous, the heart often beats with sufficient force for the sounds to feel necessarily the effects of the vigor of the impulsion. If this be true in cases where the force of the ventricular contractions is only momentarily exalted, it is so, for a stronger reason, where the exaltation is permanent and organic—in cases of hypertrophy. But we will then rarely be able to note the sounds of which I now speak, for however little the valves partake of the hypertrophy of the fleshy tissue itself, a new shade immediately presents itself and the sounds

are *dry* and *parchment* like. I will refer, for example, to our 1st observation, in which the sounds were described and where the autopsy showed us such a feeble thickening of the valves that we noted it as a case of almost simple hypertrophy.

3d Division.—*Sub-normal sounds.*—In this division, diametrically opposite to the preceding, we may admit two subdivisions; the sounds may become simply enfeebled or entirely null. We should remark, of course, that in the latter event, two conditions are possible: the heart may cease to beat, as for example in complete syncope: or, its beatings may be distant from the ear and separated from it by a liquid—a feeble conductor of sounds. We know that in a considerable hypertrophy, the absence of the sounds of the heart is not a symptom less characteristic than precordial prominence, the extent of dullness, etc.

If the sounds, instead of failing entirely, are only enfeebled, that is to say, if they are less *thrilling* and *not so strong* as natural; if they are, as they are then termed, *heavy*, *hoarse*, *veiled*, or *distant*, different conditions, either morbid or physiological, are possible; thus, to begin with these last, the embonpoint of the patient, the interposition of a thick lamina of the lung or a semi-syncope, are so many circumstances that necessarily effect an enfeeblement of the sounds of the heart. And let it not be believed that this is a puerile remark, without practical value: I have very often seen cases where even a practiced ear was permitted to hesitate in the interpretation of the sound of which we speak, between one of the circumstances which we have cited, and a lesion that we are now about to particularize.

These lesions are very various, and as one may readily conceive, many of them are, in some respect, indicated in advance by the category of the opposite cases, that we have studied above.

Thus if the dilatation of the cavities of the heart, with emaciation of its parietes, may exaggerate to our ear the shrillness of the sounds of that organ, it is evident that sounds entirely opposite must be the result of opposite anatomical conditions, the thickness of the walls of the heart coinciding or not with the contraction of its cavities; if simple hypertrophy manifests itself by sounds forcibly struck, atrophy is expressed by sounds feebly marked.

But further, and it is the first time since we spoke of the auscultation of the heart, that the play of the valves, so important in the stethescopic history of that organ is presented

to us, the beginning endocarditis sometimes enfeebles the *valvular* sounds—renders the valves *hoarse*, if the expression may be used; as if, in this respect, there existed a sort of symptomatic analogy between the slight tumefaction of these membraneous veils and that of the vocal cords, the first indication of a laryngitis.

We have shown, in the course of our clinical analysis, how the blood, cut by the tendinous cords of the heart, sometimes leaves a fibrinous deposite on the interior of that organ, and especially on the tendons themselves, or on the valves into which they are inserted. This coagulation, molecular in its principle, this first rudiment of fibrinous concretions, which may become sufficiently voluminous to completely obstruct the play of the heart, also produces a partial extinguishment of the vibrations of the valves and deadens their clacking.

Finally, before a hydrops pericardii becomes sufficiently abundant to smother completely the sounds of the heart, we perceive that the first effect must be a gradual enfeeblement of them, so that they are heard as if at a distance, which is, in some sort, the prelude, more or less graduated, of their complete effacement.

4th Division.—*Modified sounds of the heart.* This modification may have respect to the *seat* of the sounds, to their *tone*, to their *rhythm*, and to their number.

1st. *Sounds of the heart modified in their seat.*—This subdivision corresponds to the displacements of the heart, may be either congenital or acquired. We know that in congenital displacements of the heart, the other organs contained in the thoracic and abdominal cavities, present the same transposition. As to acquired displacements, they result almost exclusively from pleural effusions. I have seen in our wards, (St. I de Dieu) a patient with whom, under the influence of this cause, the heart beat immediately beneath the right breast. I have seen, with another, the heart situated in the region of the inferior hollow of the sternum. In these different cases, and the first itself, as remarkable for the displacement of the heart, would justify us in believing that the diagnosis would not at first find itself indicated by the complete absence of the sounds of the heart in the precordial region. This would be an error. These sounds, on the contrary, are often distinct at that point, owing to the propagation, that I have seen, more than once, deceive the ear, momentarily, at least, and until a more prolonged exploration had exactly ascertained, sometimes by ausculation alone,

and at others by the inspection and application of the hand, the anormal point of departure of these sounds. Now, I specify this subdivision only as a memorandum, and it is evident that it ought not to detain us here.

2d. *Sounds of the heart modified in their tone.*—It may be thought that this subdivision is a repetition of those relative to the augmentation or diminution of the clearness of the sounds of the heart, if I did not define the terms and exactly precise the spirit of this new subdivision. When I say that the sounds of the heart may be modified in their tone, I do not intend to express an impression, in relation to either an excess or defect of one of the qualities of the sound perceived by our ear; I allude to a new quality, a modification of the sounds of the heart, that M. Bouillaud designates under the name of *dry* or *parchment* like sounds: not, as it is sometimes believed, that there is the least relationship between this shade of sound and the parchment or new leather sound, which we will find hereafter; but because to an ear, practiced in auscultating the heart, the sounds then present a character of dryness and hardness, analogous to that of the clacking of parchment valves.

I do not doubt but the reader, as yet but little accustomed to our method of explanation, will consider this remark rather too minute, perhaps presumptuous.

I acknowledge on my part that time and long experience were necessary to enable me to comprehend the clinical value of this denomination, and especially to familiarize my ear to a shade of sound, sometimes so difficult to appreciate. But, I may add, that to me now, this morbid sound is one of the most incontestible that I know, and the expression *bruit parchemine* one of the most correct in our stethescopic vocabulary.

I will say more; the sound of which we are now speaking is, in my opinion, one of the best reasons for relying on the theory of M. Roannet. And, in fact, the lesion to which this sound corresponds, a lesion constant and unique moreover, is nothing else than a thickening of the valves, without deformation; neither is this slight puffing, the result of a commencing endocarditis, which we have seen above produce a hoarseness of the valvular sounds, but a little more induration without doubt, in these membranous laminæ, a little exaggeration of their nutrition; in one word, not a congestion of the valves, but rather their hypertrophy. I will refer, for examples, to our observations 1, 7, 10, etc.

3d. *Sounds of the heart modified in their rhythm.*—We have seen above that the pulse was susceptible of becoming unequal, irregular, and intermittent, which well understood, have their point of departure and cause in a sort of corresponding ataxy of the contractions of the heart. We should expect, then, to find, in these cases the same disorder in the valvular sounds. And, in fact, these sounds may offer to us, in their succession and in their rhythm, quite as many analogous disorders. They may even offer them yet more numerous; and the reason of this difference is very clear. In order that the radial pulsation, that kind of distant echo of the ventricular systole, may be perceptible under the finger, it is necessary that there should be at the same time a certain volume of the sanguineous wave and a certain force of impulsion on the part of the heart. We conceive that these two conditions are necessary in a less degree, in order that the result nearest to the systole or even to the arterial diastole, that is to say, the readjustment of the valves, may become sensible to our ear. Then we will be able to perceive a greater number of valvular sounds, normal or not, than we can count radial pulsations with the fingers. It is that which takes place, for instance, in what M. Bouillaud has named the *faux-pas of the heart*, that is to say when the ventricle, incompletely filled, as a consequence of an auriculo-ventricular contraction, beats whilst almost empty. It is that which takes place in false intermittence of the beats of this organ, that is to say when, instead of being completely absent, as in the true intermittence (*stoppage* or *hesitation* of the heart,) the ventricular systole is only more feeble. It is the same that may happen in those disturbed and ataxic movements of the heart, when its beats of unequal force, and repeating at intervals also unequal, present to the ear nothing but confusion, tumult, and, if I may thus express myself, a chaos so much the more inextricable at times, as it is not rare for the two times to participate and that thus for a single systole there are two or three diastoles, as, in other instances, for a single diastole there may be two or three systolic movements.

Disturbances, so pronounced as these, coincide, we may say necessarily, with one or more organic lesions of the heart. We have shown in reference to the pulse that they cannot furnish us any positive indication of the species or special seat of these lesions. I will now go farther; there are some of these disorders which may coexist, with a complete ab-

sence of these lesions, with palpitations, the result of causes, purely nervous. I have been more than once warned, by the defect of the rhythm of which I speak, of the existence of this sort of palpitations with patients who did not care to inform me in reference to them. In these cases it is in general the intermittence that we observe; sometimes also there are other irregularities, but which seemed, at least, to be subjected to a certain order of periodicity, being reproduced, for example, in the state of the usual calm of the patient, often nearly a uniform number of regular contractions. Now, there is only one secondary consideration in the differential diagnosis of these nervous irregularities and those that depend on organic lesions. The latter are always accompanied by a train of other symptoms, such as the abrupt, but otherwise vigorous and massive impulsion of the point of the heart; such as souffles and other morbid sounds, etc., symptoms, the absence of which characterises the palpitations which result from the neuroses.

4th. *Sounds of the heart modified in their number.*—In ausculting the heart we sometimes hear three and even, but more rarely, four sounds instead of two. This peculiarity is rather curious than of any very notable clinical importance. It is not rare, at least for the triple sound. Thus in the wards of M. Bouillaud I have sometimes seen two or three examples of it at the same time. In almost all the cases, that I have observed the anormal duplicity existed at the second time, and the two last sounds were sufficiently approximated and brief, in relation to the first, to remind us of the dactyl of the Latin verse, composed as every one knows of one long and two short. It is this triple sound, this *bruit dactyloide*, if I may be allowed the expression, that M. Bouillaud has compared to the roll on the drum, or to the triple sound of a hammer that rebounds on an anvil.

It is with organic lesions of the heart only that this modification of the rhythm of the sounds has been observed to coincide; but with what particular lesions? This we are not able to determine in a very positive manner, M. Bouillaud, in his *Treatise on the diseases of the heart*, says that he has never encountered the rhythm of three or four sounds, but with patients afflicted with contraction of some one of the orifices of the heart, with induration of the valves, accompanied ordinarily with the sequences of pericarditis. More than once, at the bedside of the patient, he has appear-

ed to us disposed to refer the triple sound to a contraction of the bicuspid orifice, with hypertrophy of the left auricle, supposing, without doubt, that the auricle contracted twice on the sanguineous wave intercepted by the narrowness of the orifice, whence resulted the third sound, which was necessarily, (and in fact it is what ordinarily occurs in the triple sound,) a souffle quite short. I have among my observations only a single case of triple sound submitted to an autopsy. I have cited it above (Obs. 21); we have there seen a contraction of the bicuspid orifice and a hypertrophy of the left auricle. I have seen this same special hypertrophy existing in the heart of a horse, with which Dr. Leblanc had many times verified a very distinct triple sound. These, then, are facts favorable to the explication that I have given. But, on the other hand, how often have we seen this hypertrophy of the left auricle, with contraction of the bicuspid orifice, and our own observations have furnished us more than one example of it, unaccompanied by supernumerary sounds. Can we say that the quickness of the circulation has been the sole cause of this absence? For my part, in agreeing that there have been cases in which the triple sound was really produced by the cause that we indicate, the fourth sound appears to me to have been sometimes also the result of pericardiac friction, which was added to the sound of the first time, I prefer to say, (and M. Bouillaud is not far removed from this idea,) that these disorders in the rhythms of the sounds of the heart are the effects of a corresponding disorder in the synchnonism of its usual sounds, or in their relative duration, a derangement that may be owing to a lesion of any one of the orifices. Let us suppose, in effect, that at the second time, for example, the clacking, normal or not, of the aortic or pulmonary valves having ceased, a little souffle still continues, produced by the retarded passage of a jet of blood restrained by the narrowness of an orifice; evidently this orifice may be either the bicuspid, contracted, or the aortic, insufficient. Let us now suppose, and I have seen examples of it, but more rarely, that the doubling of the first time may be the cause of the triple sound, it is still evident that this doubling of the first sound may be the result of insufficiency of the bicuspid orifice, (against which a little bloods till rubs when the clacking, more or less normal, of its valves, has ceased—a clacking not incompatible with its insufficiency,) or the tricuspid clacking; oftener still it will be the result of contraction of the aortic orifice whose souffle, it will be readily perceived, may

be more prolonged than the bi or tricuspid's clacking—or finally, that the left ventricle, contracting at two efforts upon the column of blood incompletely expelled, the bicuspid valve thus clacks twice immediately and successively.

It is well understood that, in order that this doubling of the times may be perceptible to our ear, it is necessary that a certain interval exist between this double time and the return of the other; it is only necessary that the rapidity in the succession of the sounds should not be so great as to reproduce the simple sound before the double may have been perceived. This remark, suggested by reason, is moreover proved by observation.

There is, then, no difficulty in accounting for these multiplied sounds, and in showing that they weaken in no respect our valvular theory. I will go farther; in reflecting on the possible if not efficient duplex conditions of sound, which naturally prevail at the production of each of the sounds of the heart, that is to say, the simultaneous escape of the blood by one orifice, and its arrival by another, we may be astonished that the triple or quadruple sound does not exist more frequently, if we do not remember the silence that exists between the two sounds that I have just pointed out.

In opposition to this multiple sound, M. Bouillaud has remarked that there is often, on the contrary, unity of the sounds of the heart, a unity, if not real, at least apparent and depending upon a two-fold circumstance:

1st. The existence at one of the times of quite a prolonged souffle.

2d. Brevity of the interval that separates the two times.

In these cases the souffle absorbs, in some sort, the other sound, and does not permit it to be appreciated, because it either still continues or is repeated when the other sound is produced. We have, in the observations above cited, specified many examples of this fact. We have noted that we may often be wrong in supposing the existence of a double souffle, and that a good precaution, before settling upon this idea, consists in removing the ear from the precordial region, in order to ascertain if the moment will not occur when the souffle, enfeebled by distance, will not permit the clacking of the other sound to be distinguished. We may, but less promptly, arrive at the same result, in retarding the movements of the heart by means, for instance, of digitalis. By this means the interval between the two sounds is extended, and they are rendered distant from each other.

There does, nevertheless, appear to exist some cases in which the second sound really fails, the movements of the heart being extremely feeble. I have observed no such facts. But M. Bouillaud specifies them, and adds that, well understood, the absence of the second sound supposes only a feebleness and not a complete failure of the corresponding movement of the heart—a movement without which we cannot conceive of the circulation.

5th Division.—*Replaced sounds of the heart.*—In all the morbid sounds that we have passed in review up to the present point, it was possible to find and to recognise, more or less clearly, the primitive character of the normal sounds of the heart—the valvular clacking. In one word, all these sounds might be considered, with more or less reason, as altered clacking. In those which are the object of the section upon which we now enter, there is no more clacking, or at least, the clacking, if we still find it, will be no more than an accompaniment—an accessory often itself unnatural, a sound altogether of a different nature, both in relation to its sonorous qualities and to its cause.

And, in fact, as we have already said, the valvular clacking is the result of the readjustment and of the vibration of the valves of the heart: this new sound proceeds most frequently from the fact that the valves are no more able to readjust themselves or to vibrate properly. In the clacking there was a shock of blood against a valve: in the sound of which we are about to speak there is friction of the blood against this valve. Clacking indicates to us only that an orifice closes: this sound indicates in general that the orifice is not closed. Clacking has its point of departure only at the orifice through which the sanguineous wave passes; this sound has its point of departure sometimes in the same orifice badly closed, but more frequently at that through which the blood escapes, and which is imperfectly opened. The seat of the first then is single, that of the second may be double. (It is understood that I speak here of only one of the valves of the heart.) I mean to say that the indications of the second will be less easily gathered and less precise at first than the semeiosis of the first. Every one has, doubtless, divined this morbid sound; it is the souffle. The souffle, primitively called *bruit de souffle*, comprehends all the *valvular* sounds that now remain to occupy our attention. The veritable proteus of the stethoscope, it is it which under the influence of such or such modification in the mobility of a valve, in the contrac-

tion of an orifice, let us rather say, under the inspiration, more or less happy, more or less poetic, of the observer, that I say we will see it transform itself now into the sound of a rasp, then into that of a file or a saw; now flexible and soft, anon rude and creaking; sometimes chirping like a young chicken, at others warbling like a turtle-dove, or yelping as a little dog, etc. Let one not believe that all this is but a sport of the imagination or unnatural metaphors; no, they are, on the contrary, only faithful translations of impressions really perceived—the veracious and positive interpretation of a sound observation.

Are we to conclude, hence, that the souffle is a sign easily appreciated, which requires only a slight attention, and that it strikes the least practiced ear? This would be an error; for, more than all others, perhaps, this morbid sound offers to us shades and degrees, we may almost say, indefinite. But to speak first of the best characterized souffles, of those raspy sounds, if you will, or of the cries imitating those of certain animals, these do generally, doubtless, present themselves readily to our ear. But who can tell if they occur in the heart or in its envelop, if their seat be not in the pleura itself, of which the movements are not always so easily suspended as some think? Who can tell even, in some cases at least, to which of the two times of the heart the sound in question corresponds? And if it is permitted sometimes to hesitate thus, when at least we are assured of the existence of this morbid sound, how will it be with those light, rapid, fugitive souffles, which we must seize on the wing, if I may be allowed the expression, and to localize the same; that one may so readily allow to escape, or may confound now with a slight grazing of the pericardium, and then with a pleural friction, and who knows but sometimes even, in a too hasty exploration, with one of the vesicular sounds.

I cannot impress too strongly on those who desire to study the maladies of the heart attentively and conscientiously, to exercise the ear to the bruit de souffle, and, as I have remarked above, the best preparation for this is the frequent auscultation of the normal heart. And, in the second place, and when once the ear knows well what a souffle is, and of what principal shades this morbid sound is susceptible, it is necessary to know how to recognise the special time to which it corresponds; if it is simple or double; if it is really or only apparently double; if it does or does not mingle with valvular clacking, or friction of the precardium, or pleura, etc.

Thirdly, and finally, and it is not the point most easily determined, it is necessary to ascertain to what point of the precordial region the maximum of the souffle, is to be referred; is it heard most distinctly without or within the nipple? Is it towards the point or towards the base of the organ; or yet towards the left border and in the inferior hollow of the sternum? Finally, does it or not propogate itself into the ascending aorta and into the carotids? We are about to see that each of these indications has its peculiar value and diagnostic bearing; or rather, have we not already seen it many and many times in our clinical analyses? It is here especially that I would have cause to fear very frequent repetitions if I had not imposed on myself very contracted limits, and if I did not remember that I ought to resume now rather than to develop the practical considerations which attach themselves to our subject. Let us then study the souffle succinctly, in each of the times of the heart isolated, and also in the two.

1st. *Souffle of the first time.*—We must acknowledge that this souffle is often, by itself, one of the most insufficient signs that we have yet encountered. In truth it may exist with or without organic lesion of the heart. In the first case, the cause may be simply an increased rapidity of the sanguineous column; I have spoken of this fact, in the commencement of this memoir, with sufficient details to obviate the necessity of recurring to it here. But most frequently it is acompanied by special alteration of the blood-chlorosis or chloro-anemia.

By what characteristics shall we recognize the chlorotic souffle?

By the following; like that produced by quickness, this souffle never exists but at the first time; it is generally very slight and short; it *accompanies* the clacking of the first rather than masks it; it is heard especially in the region of the aortic orifice and very often exclusively at this point; sometimes, in truth, it is propagated along the ascending aorta, and now and then as far as the carotids, but in these cases, it is stronger and not so brief as I have just supposed it; and, in fact, (I speak only of chlorosis, properly so called,) it may be sufficiently prolonged, intense and even rude enough to simulate a souffle of organic origin: in fine, it is very often inconstant and variable in respect to its intensity and even in regard to its existence; such a souffle, now very distinct, may immediately become entirely inappreciable.

What is the determining cause of this souffle? Let us seek, in the characters themselves that we have assigned to it, if we cannot encounter some of the elements of this problem. We have said that the maximum of this souffle was heard in the region of the aortic orifice; thus, then, is its seat already anatomically fixed. It exists at the first time; then it is at the moment that the sanguineous column passes this orifice, that it is produced. But, as we have seen, all species of bruit de souffle suppose an excess of friction; to what then can this exaggerated friction be owing? Evidently we should seek for the reason only in an anormal condition of the sanguineous column, or of the aortic orifice. The condition of the blood should first receive our attention; for every one knows that it is precisely the grave modification that this fluid undergoes in its composition that constitutes the most essential element of chlorosis. Certain observers have dwelt upon this point, and they have said: Physics teaches us that the friction of a fluid is in an inverse ratio to its density; then blood becoming less dense, such as chlorotic blood, ought to produce more friction; but they have not anticipated this objection, that if it were thus, the friction, and by consequence the souffle, ought to cease only when the blood shall have resumed its normal density, and that this fluid does not momentarily vary in its composition, whilst however the souffle in question has an inconstancy and variability but little compatible with this fixity of chemical constitution. There remains then the aortic orifice. Do we not find here some possible conditions of narrowness, of contraction, transient, variable and intermittant? Yes! if we consider on one hand, in virtue doubtless of the old adage: *sanguis frerat nervos*, chlorosis is a disease remarkable for infinite troubles or disorders, essentially nervous; and on the other hand, that by means of the ramifications of the great sympathetic, which distributes itself to their coats, there exists between the arteries and the nervous system the most intimate connection, a very frequent cause of arterial disorders essentially local. Hence those flushes of facial heat, hectic flushes, those circumscribed pulsations now of the carotids and anon of the cœliac trunk, etc. Hence those anomalous arterial contractions, those spasms, those contractions semi-convulsive, variable and very extended, like the apparent and external phenomena that I have just cited, and like all that, moreover, which is owing to a nervous ataxia, and which will produce here, the bruit de diable and its numerous variations; there, a simple souffle, acoustic phe-

nomena so evidently in proportion to the calibre of the vessel in which they are seated, and of which the shades of difference are so very dependent, upon the greater or less contraction that the tunics of these vessels may undergo.

In our opinion, then, the chlorotic souffle is nothing but a nervous spasm of the aorta. It is the bruit de diable of this large vessel—bruit de diable which does not generally go beyond a bruit de souffle, but which however sometimes, in cases of chlorosis of the highest degree, of which I have myself seen an example, may extend to a musical whizzing; this souffle moreover tending generally to become sibilant, there is a coexistence of chlorosis and organic lesion, a cause itself of a permanent narrowness of the aortic orifice.

If I insist somewhat in detail on this chlorotic souffle, it is because the observations that we have reported, essentially consecrated to the study of the symptomatology of the organic affections of the heart, offered us no occasion to particularize it, and that however we might pass in silence a sign which so nearly affects the study in which we are engaged, a sign which may often present so high an interest in reference to the differential diagnosis.

We can scarcely believe, in fact, how many errors in diagnosis this souffle daily causes, how many anemice women, or young chlorotic girls, in whom we every day see combatting by repeated vene section, an imaginary affection of the heart, diagnosticated principally from this fatal bruit de souffle, of which the treatment itself becomes then, in some sort, the best aliment.

We understand this error when we see it so often renewed, or when we know how little habit of auscultation so many practitioners bring to the exercise of their profession. But what I cannot comprehend—and I acknowledge that it is revolting to common sense—is, that there are young writers, so very badly instructed, as to accuse of a similar blunder, who? M. Bouillaud himself; M. Bouillaud who has so often pointed out this source of error; these gentlemen tell us seriously that the pretended lesions of the heart, which, according to this professor, coincide with rheumatism, are only simple cases of anemia, and that the souffle which diagnosticates them is only a souffle of impoverishment of the blood, the result of the medication to which the patient has been submitted.

But we will not dwell any longer on an accusation, all the shame of which must recoil upon those who have raised it;

we will now pass to the souffle of the first time with organic lesion.

Contrary to that of which we have spoken, the organic souffle, located in the first time, is generally more or less prolonged; it may replace entirely the valvular clacking, which may not really exist, or may not be distinguished from the souffle that makes it; like the preceding, its maximum may exist in the aortic region; but contrary to it, it may also respond more especially to the bicuspid orifice; like the preceeding it may be prolonged into the ascending aorta, and along the carotids; contrary to it, it does not momentarily vary, and especially does not entirely cease to exist when it has been once verified.

Does this souffle, separated from that of the other time, often exist? No! in all our observations, I perceived it only in the the third and seventh thus isolated. With what lesions does it especially coexist? In the two cases to which I refer it was with aortic lesions; valvular thickening in the first, and a cretaceous state of the aorta in the second. This last lesion, however, is now frequently expressed by a souffle of the second time, or better by a double souffle. As to the bicuspid orifice, we conceive that the exclusive souffle of the first time very rarely responds to its alteration. For what would then be that lesion or insufficiency? a lesion but little compatible with the free play of that same valve, at the other time, save always the exceptional circumstance of an insufficiency owing to a discrepancy between the valves remaining normal and an enlarged orifice.

As we see it, then, and I have more than once made this remark, the time to which a souffle responds does but indicate the orifice diseased. Here, however, we may say, empirically, that this will be, ordinarily, the aortic orifice. Now we may be assured of this by the seat of the maximum of the souffle, and by its propagation into the carotids; the absence of this propagation and a difference of seat indicating to us a lesion of the bicuspid orifice. As to the species of this aortic lesion we may readily comprehend that it will always be a contraction, either absolute or relative. The last will coincide, for example, with general hypertrophy, or with a dilatation of the left ventricle; the first will be occasioned by a thickening of the valves, either by a deposit of cretaceous matter on their surface, the presence of vegetations on their free border, or concretions between their lamina. It is sometimes possible, in the diagnosis, to discriminate more or less exactly one of

the lesions that we have indicated. Sometimes, for example, the limit and acuteness of the souffle gives us, in some sort, the measure of the contraction. It is then, according to the expression of M. Bouillaud, a raspy souffle. We have seen that when chlorosis coexists, the souffle may be sibilant. In all cases of extreme narrowness, the pulse moreover comes to our aid by its smallness and slenderness, if there be vegetations, and especially of a cretaceous matter on the valves, the souffle will be less pure in its tone, harsher, less polished, accompanied often by a vibratory tremor, that, in fact, we have more than once seen in our observations, establish the diagnosis confirmed by the autopsy. If there are clots only (they are rarely located at the aortic orifice exclusively,) the dullness of the souffle, its variations sometimes, the palpitations and dyspnœa of the patient, the character of the pulse, the coldness of the extremities, etc., will develop to us this morbid peculiarity.

I have said above, that the souffle, limited to the first time, is very rare. This remark, in my opinion incontestible in cases of rather ancient organic lesions, will be less so as applicable to forming lesions, to those, for example, which begin under our observation during the existence of some acute malady, most frequently a rheumatism. Often, in fact, we are warned of the imminent peril by a souffle yet slight, and which, for my part, I have seen more than once then existing only at the first time. How shall we discriminate between this inflammatory souffle—this veritable sign of endocarditis, and a chlorotic souffle? To an experienced ear, this souffle has at first very often a special tone—a peculiar stamp which will not permit it to be mistaken. May we then believe in a chlorosis or anemia; if the patient has been but little or not at all bled; if the blood drawn from the vein is rich and openly inflammatory; if it makes more than 5° on the *areometre* of Baume, a limit above which the anemic souffle cannot be produced according to the experiments made in the wards of M. Bouillaud; if this souffle diminishes and is enfeebled, instead of increasing, under the influence of emissions of blood; and, finally, if the patient's face is strongly and generally colored, his pulse vigorous and developed, the impulsion of his heart energetic, all circumstances but little compatible with a state of chloro-anemia, and especially with the production of a souffle from impoverishment of the blood; if, above all, we find the precordial dullness enlarged, the point of the heart displaced, etc.? These are the cases in which some have dared to assert that M. Bouillaud mistook an anemia for an

endocarditis. Shall we say that the distinction, of which I speak, between the two souffles of the first time is always so striking? No! doubtless, I frankly acknowledge it, there are some difficult cases; but what are these cases? They are those, in which the individual copiously bled before our examination, or already debilitated by protracted disease, present at once the palor of anemia and the acuteness of repeated rheumatism, inflammation of the lungs, etc. It may be the case with a young chlorotic with whom one of the maladies that I have cited, declares itself in an acute form. Then, in truth, and only then, will we be permitted to hesitate, at least at first, on the nature of the souffle. Then we cannot have had too long a practice, or too consumate clinical experience to surmount this difficult diagnosis. Then, again, the impartial and attentive observer, who may have long followed M. Bouillaud to the bedside of the afflicted, must admire the exquisite tact and shrewdness in diagnosis of that clever practitioner, the certainty and penetration of his glance.

One more thought before we terminate this long paragraph. Such a souffle may be really simple, that is to say, being actually produced only in one of the times of the heart, and for example, at the first time, and yet may appear to us to be double, if on the one hand, it is sufficiently loud to mark the clacking which is isochronous, and, on the other, is repeated so quickly as not to permit the ear to seize the sound that succeeds it. We have seen that the means of discriminating between this apparent and real duplicity is simply to auscult beyond the precordial region. A souffle propagating itself to a less distance than the valvular clacking, will not fail, if the souffle be single, to enfeeble it sufficiently by distance, to disengage the valvular clacking.

We will now take up the subject of the souffle of the second time.

2d. *Souffle of the second time.*—If we are permitted to hesitate, in regard to an organic affection of the heart, because we only perceive a souffle at the first time, the same uncertainty does not attach to that of the second. Then there is always valvular lesion, an obstacle to the free play of the valves. This first consideration already simplifies, in a remarkable degree, the history of this morbid sound, which is moreover, somewhat sketched in advance by that of the preceding souffle. Who does not perceive, in fact, that like the former, the cause of the second souffle may reside either in the narrowness of an imperfectly opened orifice, or in the insufficiency

of a valve imperfectly closed. It is then, still true here, that the sound to which the souffle responds, no longer indicates the injured orifice; but, however, with the addition of this remark, which the other souffle has suggested to us, that the insufficiency of a valve being scarcely compatible, save in the cases that I have specified, with a disproportion between the valve and the dilated orifice, with the integrity of the other sounds, which the unity of the souffle supposes; we will be led then, to infer from a souffle of the second time, a contraction of the bicuspid orifice rather than an insufficiency of the aortic valves; always, however, proving this inductive, first by an appreciation of the anatomical seat of our souffle, and by absence of propagation into the carotids. As to the particular kind of valvular lesions that this souffle supposes, what is the need of indicating them here? And what would this enumeration be, but a repetition of the corresponding part of our preceding paragraph, presenting no other difference than a transposition of the two orifices?

Further, such as we will at present consider it, that is to say, isolated, the souffle of the second time is still more rare, than the first. I do not even find it pure from all mixtures in any of our observations. I will indicate, nevertheless, an example of this souffle, if not single, relative to the two times, at least so in reference to the play of the same valve, our observation 6 in which this souffle appears to have been produced by the cretaceous state of the aorta; and our observation 17 where this souffle, single in the region of the bicuspid orifice, corresponded evidently to the contraction of that orifice, without mixture of insufficiency. We will find even well indicated, in this last case, that character of raspy souffle that we have declared to be an almost certain indication of the degree of the contraction of the altered orifice.

Apart from the sibilant souffle of chlorosis, all the other shades of the first souffle may be produced by this, and diagnosticated in the same manner. I will not then dwell on this point; less still will I insist on the apparent doubling that this souffle may present. All that I have said on this subject, in reference to the preceding souffle is exactly applicable to this.

3d. *Souffle of both times.*—Having studied successively the souffle of the first time, and that of the second, we are prepared to comprehend those cases in which a double souffle is the result only of a succession of these two, each of them coinciding, by hypothesis, with the corresponding clacking, which is only more or less completely marked. Evidently,

in effect, for the history of this fact we can only refer to the two preceding histories. But if this state of things be possible; if, for example, we may have simultaneous contraction of the two orifices, without insufficiency of either; or, reciprocally double insufficiency without contraction; we may say that it is not common. I refer in this matter to our twenty-one observations. Among them scarcely a tenth could give us an idea of this sort of pathological anomaly. Much more frequently the two souffles have their cause in the double lesion of only one of the orifices, or of both, or in the double lesion of one accompanied by simple lesion in the other. I will explain myself by some examples; the double souffle being very common in organic affections of the heart, our observations will furnish them abundantly.

1st. Suppose a single valve be at the same time, sufficiently thickened to effect a certain contraction of the corresponding orifice, and so deformed as to re-adjust itself only imperfectly; will we not then have successively the souffle of contraction and that of insufficiency? This is established by our observation. We think the same result will occur if the valves adhering either to each other, (observations 13 and 17,) or even partially to the adjacent parietes of the heart, (observations 13 and 15,) offer either a narrow passage, unfavorable to the ingress of the blood, or a passage always open, too favorable to its reflux.

2d. Let one of the two valves present this condition of double souffle, the other may also be altered, but in such a manner as to offer only one of the two morbid conditions of which we will speak presently; we will still have a double souffle, so much the more marked, be it understood, as we approach nearer to the orifice principally affected. (See observation 14.)

3d. Finally, for a stronger reason, we hear a double souffle if there be a double lesion of each orifice. Our observation 16 furnishes a beautiful example of it.

We should remember that the clots in the heart may yet powerfully concur in the production of a double souffle, it may be by combining their influence with that of the valves already injured, or in constituting themselves the principal cause of restraint on the valvular plays.

Shall I say, in fine, that very often it is without the heart, in the aorta itself, in the cretaceous state of its internal membrane, that we must seek the cause of the double souffle that now occupies our attention? We have insisted often enough,

in view of our facts, upon this pathological circumstance, and upon the means of diagnosticating it, to be content with mentioning it here. (See among others, observation 8.)

Let us close with a last morbid lesion, a possible but exceptional cause of a double souffle. I allude to an anormal communication between the cavities of the right and left heart. Now this case is so rare that I only mention it here as a memorandum.

Such are, if I mistake not, the principal circumstances, either anatomical or semieological, that attach to the history of the bruit de souffle. A last touch is, perhaps, wanting to the picture. We have seen in the beginning that there were some souffles possible without organic lesion; let us now say that we have seen some organic lesions, and even some of those that we have enumerated, which had existed without souffle. How shall we reconcile this fact with all that precedes, and is it not sufficient to put in question the validity of our theory? No, doubtless this difficulty is more specious than real. What is the material physical condition of all kinds of souffle? An excess of friction, as we have said. But in order that this result may be produced, who does not perceive manifestly that there is necessary at the same time, a certain obstacle to the passage of the blood, and a certain quickness of motion in this fluid? Can we consequently be astonished, that, if sometimes the excess of quickness may produce a souffle in the absence of organic lesions; in other cases also the insufficiency of this same quickness may have had for result the absence of souffle, notwithstanding the existence of these lesions? This is, at least, as frequent and quite as simple to conceive of as the opposite proposition; and for my part I have had frequent opportunities to verify its exactitude, at the bedside of the patient. I remember, in particular, one of those with whom the pulse diminished most notably under the influence of digitalis: with him we witnessed repeatedly, the disappearance and return of a souffle of the second time, coinciding with the administration and suppression of that medicinal substance.

What shall we now say, and where, in fact, is the necessity of speaking separately of the sounds of the rasp, of the file, of the saw, of chirping, etc., which we have specified above? Do we not know that all these sounds and all analogous ones that may hereafter be introduced into our vocabulary, can never be any thing more than shades of the same bruit de souffle, in relationship with such or such a degree of valvular indu-

ration or contraction of the orifices? It is, without contradiction, the sole special feature in their history, which would be only an useless repetition of that of the souffle properly called.

And now that we have traversed the details of this vast ensemble, can we fail to appreciate all the value of this morbid sound, all the predominance of this symptom? Can we not comprehend that if other signs, like this, may reveal to us the existence of organic diseases of the heart, this alone can enable us to penetrate the inmost recesses, indicate to us the orifice diseased, and show us the lesion; that to it, without any doubt, we are indebted in the largest degree, for our success in diagnosis. How then are we to conceive of practitioners so lagging as to treat, as chimerical and fabulous, the legitimate pretensions of our art in this matter, and who maintain that all is yet to be learned in reference to the special seat of the maladies of the heart? Must we not regard a scepticism so blind, as constituting really a sort of flagrant ingratitude for the beneficence of our epoch? As to ourselves, we are grateful to her for having furnished us thus a means of exploration, which the most precise methods of surgery might itself perhaps desire. Thanks to those of our predecessors, I may also say of our contemporaries, who have endowed the service with so handsome an inheritance, and let us endeavor to honor their memory, not only by paying to their names a merited tribute of gratitude, but above all by making every day new efforts to fertilize and develop in our hands the treasure that they have bequeathed to us.

This brings me to confess frankly, that there exists in these clinical researches a real void, so much the more to be regretted as it is difficult to believe that we shall ever be able to fill it properly. I speak of what concerns the local and precise diagnosis of affections of the right heart. I am aware that it has been said, that these diseases being infinitely more rare than those of the left heart, we may generally, and without much risk of error, disregard its diagnosis as of a lesion constituting in some sort an exception. But independently of the scientific inconvenience that there may be in this omission, reflected upon and empirically calculated, I will make the remark, according to the evidence of our facts themselves, that it is true that they are rare, as primitive and capital lesions, but they are no less sufficiently common as secondary ones; and to disdain their solution is to abandon an element of this diagnostic problem often very worthy of itself to fix the attention of the observer.

To what then can this inferiority of the semieological history of the right heart, as compared to that of the left, be owing? To many reasons, without doubt. Thus first to the less frequency of lesions of the right side, which for this reason must be less known; then because the right being more central, in some fashion in regard to its destination, and at the same time less powerful in its contractions than the left, its valvular sounds must be more distant perhaps and less distinctly struck; finally, because its disorders always coinciding with the more grave disorders of the left heart, the morbid results of the latter readily mark to our ear those of the former.

All these practical difficulties are assuredly grave; but are they insurmountable? I think not. We have ever seen, in the analysis of our clinical facts, that our efforts at diagnosis in that respect have not been altogether unproductive. Let us sum them up then in a few words and ascertain what is the actual state of the science in that respect.

Certain practitioners have said: Divide the precordial region by an imaginary vertical line; the morbid sounds which predominate on the right side of this line, between it and the sternum, will appertain to the right heart, those that predominate on the opposite side of the line will belong to the left. This mode of exploration is far from being infallible. That the distinction upon which it rests may be true as applied to the normal sounds, or when the sounds of the right heart are only modified or replaced, I dare not either affirm or deny. But I can say, with an assurance supported by numerous observations, that when the left valvular sounds are gravely altered, they engross in some part our ear, and exclusively absorb our attention, may be on one or the other side of the line indicated. I will refer, however, to our obs. 13 and 14, in which in fact a bruit de souffle, towards the inferior hollow of the sternum, was noted during life, and a lesion of the tricuspid orifice verified after death. But, also, and in opposition to those two cases, I will refer to obs. 15, in which a lesion perfectly analogous coincides with the complete absence of this special souffle.

The want of certainty then in this sign, was a reason for seeking in others indications more constant and less unfaithful. These other signs are all more or less the immediate results of functional disturbances by valvular contractions of the right heart.

These disturbances affect then, principally, two great functions, respiration and venous circulation.

If we were permitted to assist at the beginning and to follow all the symptomatic phases of an organic affection of the right heart, I do not doubt but the first disorder would be furnished by the respiratory apparatus, and these by consequence more or less generalized by the stasis of the venous blood. But these things do not occur commonly, and like the lesions of which I will speak are consecutive, sometimes terminal; the same is true also of the symptoms that they occassion, showing themselves only at an epoch more or less remote of the stage of the disease and sometimes only in the last days of the patient.

Now, what I say of the right heart, ought not to cause us to lose sight of the relation, yet more intimate, perhaps, which also exists between the lung and the left heart. This receiving directly the blood that the lung sends to it, cannot be obstructed in the least degree, without this arterial stasis communicating itself gradually to the pulmonary parenchyma. The right heart or the contrary sending the blood to the lung, however little the propulsion may be suspended, the nervous stasis reaches the pulmonary parenchyma through the medium of the vena cava superior into which the veins that have nourished the lung itself, empty, and yet it is perhaps true in consequence of this suspension of the *vis a tergo*, that under the influence of the right ventricle, the venous column exerts upon the movement of the blood which has previously reached the thickness of the pulmonary tissue.

To sum up, then, we have on the part of the respiratory functions direct disorders, if I may use the expression, only in cases of very considerable ventricular hypertrophy, if certain valvular conditions do not intervene to neutralize its influence either by breaking the sanguineous wave (contraction of the pulmonary orifice,) or by turning it from its course (tricuspid insufficiency). These disorders in the lungs, are sanguineous effusions, more or less extensive, hæmoptysis alone, or even apoplexy. At other times on the contrary, and this is more common, there is, as in the preceding cases, cough and dyspnœa on the least exercise, but the lung is no longer infiltrated with blood, which is effused; it is engorged with serum, which speedily accumulates at every point where the venous blood ceases to have a free course, it becomes œdematous. Then, also, there soon supervenes many

other analogous results, produced by the same cause; thus the purple color of the lips, the swelling of the face, the infiltration of the extremities, that often open the scene gradually, invades from below upwards the inferior extremities, then the parietes of the abdomen, and even complicating itself with ascites. Then also the jugulars are distended, and we may note the venous pulse, that almost infallible indication of the retrograde movement of the sanguineous wave, through the imperfectly closed tricuspid orifice. I repeat it, to those who have followed the developement of these different symptoms, added to some of those that indicate to us that the heart is organically affected, as prominence, displacement of the apex of the organ, extent of the dullness, etc. the diagnosis of the lesions of the *right* heart cannot be doubtful; and I remember that in a large number of our observations these were the signs that caused us to admit disorders that were demonstrated by the autopsy.

We should remark, however, that all the signs are only the results of functional disturbances, effects more or less removed from the anatomical seat of the pathological cause. Should we compare, under this view, these signs always indirect, to the signs of the immediate product of that lesion itself, which have the same anatomical seat, if I may thus speak, as that lesion to, the morbid sounds, in a word, inherent to the more or less deranged play of the diseased valves?

However we should note, *en passant*, that these were the signs, par excellence, before the discovery of auscultation. They were the characteristic pathognomonic symptoms of diseases of the heart in general in the school of Corvisart, and many of these constituted, what that illustrious observer called the *facies propria* of the disease, adding that these *facies* were the surest guide of the practitioner; signs of but little fidelity, nevertheless, when we consider them, in that extended sense, since they are, if not exclusively, at least principally affiliated to diseases of the right heart, diseases that are in general secondary, and that in these diseases themselves they appear only more or less removed from the beginning; we may say, that they sometimes fail altogether; witness our 17th case, with which the notable dilatation of the tricuspid orifice and of the corresponding auricle was not indicated by any of these signs.

This digression, rather lengthy perhaps, but which merited

a place in the symptomatological study of the lesions of the heart, has caused us to loose sight, for some moments, of the categorical order that we have pursued. Let us then now return to it and enter upon our last division of the sounds of the heart.

6th Division.—*Accessory sounds of the heart.*—Whatever may be the tone of the sounds of the heart, whatever may be the modifications which they present us, in whatever manner they may find themselves replaced, it can so happen, at the same time, certain other sounds appertaining either to the heart itself or to its serous envelop may present themselves. We are now about to consider especially the accessory sounds, at the same time bearing in mind, that most frequently they coexist with one or several of the morbid sounds which we have just reviewed. One other remark is common to them, it is that they may all be considered as finally reducible to the exaggeration of normal phenomena.

Thus to speak first of the heart itself, normally the point of the organ strikes, during its contraction, the walls of the chest, and this percussion, at least according to our theory, does not produce any perceptible sound, or any that we can distinguish from the valvular clacking which is isochronous with it; but, let us admit that this percussion becomes exaggerated, it may be from its quickness, it may be by the mass of the organ, then two distinct sounds can strike the ear. Sometimes it will be a clear, silvery or metallic tinkle, called *auriculo-metallic*, not to indicate, as I have sometimes seen it supposed, that the auricle contributes to its production, but to distinguish it from the metallic tinkling which has its cause in a lesion of the respiratory apparatus, or because it is almost indispensably necessary, to place the ear immediately against the chest, to perceive it.

This sound is easily simulated in gently percussing the back of the hand, its palm embracing one of the ears of the experimenter. This experiment in explaining to us the production of this sound, at the same time shows us its little symptomatic value. What does it indicate, in effect, except that the point of the heart strikes in a hurried, or in a sufficiently distinct manner, a sufficiently thin pericordial parietes, whose thickness is not of a nature to destroy its vibration

That is to say, and experience proves it, if this phenomenon can take place in hypertrophy of the heart, it is equally pos-

sible in the absence of this hypertrophy and of all lesion. It is then an accompaniment little worthy of interest, in a practical point of view. Let us add, by way of completing its history, that generally it is heard only in the systole. Sometimes, however, but by very rare exception, it is double; when that is the case, we are compelled to admit that the base of the heart has a see-saw motion equal to that of the point.

If the auriculo-metallic tinkling is compatible with a normal state, it is not thus of another sound of which I am to speak, and which is, we may say, characteristic of hypertrophy, of which it often not only assures us the existence, but to some extent even the degree. This bruit is a dull, dead sound, the impression of which often accompanied by a visible, anormal impulsion, announces by its tone and its peculiar characters the hypertrophy of the point of the organ. There is something pathognomonic in the sensation of this sound, which permits us to seperate it easily from the clearest bruit de souffle that we find connected with it, though sometimes it may itself be sufficiently strong partly to mask them.

The pericardium is normaly the seat of a serous exudation, which, lubricating the inner surfaces of the opposed leaves, soften them and facilitate gliding motion, so that no perceptible friction sound reaches the ear. But let this serous vapor become suppressed or condensed; let the glutinous surface of the pericardium yield with difficulty to the alternate movements which oppose one to the other; let them become roughened, unequal, shaggy; let them be locked by adhesions, tied by false membranes, there will necessarily result new sound, whose tone is relative to the nature and qualities of their anatomical cause; there it is a single brushing, a gentle rumpling analogous to that of a silken tissue; here it is a sound of rasping or scraping, more or less rude; now again it is a sound as of new leather recalling the analogous variety of pleural friction.

All these sounds are, evidently, only varieties of the bruit de frottement, (friction sound,) they constitute the last morbid accompaniment which we have to notice, an accompaniment which it is not always easy at first sight to perceive. We will devote a few moments to their consideration.

The pericardiac sounds, whatever they may be, are generally perceptible during the two times, but most especially in the first; they are more superficial and nearer the ear than

those of the heart properly so called; they are somtimes accompanied by certain general or local phenomena peculiar to pericarditis. Amongst the first I will recall the febrile condition, the anxiety, the agitation of the patient, &c., and amongst the second the palpitations, the irregularities of the heart, and, under the hand, a certain sensation, either of friction, or of difficulty in the movements of the organ, which we have mentioned in some of our preceding observations, (viz. Obs. 13, 14 and 18.) Sometimes very loud, they can mask the valvular sounds, whether they be normal or anormal. At other times, as when they are reduced to a simple rumpling, they can, on the contrary, escape the most attentive ear, or embarrass the most skilled practitioner, in almost perfectly imitating the bruit de souffle. I am aware that in this last case, the souffle has been supposed to be caused by a concomitant endocarditis; but I know of some facts, which cause me to think that, independent of this complication, a false membrane can of itself give rise to a bruit analogous, if not identical, to that of a souffle, doubtless more superficial, more circumscribed, and propagating itself, if I am not deceived, to a less distance; but in good faith, not capable of being exactly diagnosticated save in a special habitude.

The morbid sounds whose history we have just written, the last signs belonging to the auscultatory domain, end the list of the different methods of exploration, applicable to the diagnosis of diseases of the heart. As we have just seen, these methods are sufficiently numerous. Those furnished by auscultation being, undoubtedly, the most important of them all. I have collected them for the purpose of facilitating their study and recollection, within the limits of a portable table, the habitual accompaniment of this part of my course of diagnosis. * To it then I refer the reader, as to a succinct recapitulation of the more developed of the principles which we have just reconsidered.

If now we cast a coup d'œil upon the various data furnished by stethoscopic and other signs, must we not acknowledge that of our principal organs, either intern or extern, there is not one whose diseases are revealed to us, both generally and minutely by not only so numerous but by such precise signs, that the heart is at the present time one of these organs whose diagnosis is most positive and

* Synoptical table of the sounds of the heart.

most complete? This conclusion would doubtless appear, at first sight, very rash and presumptuous to certain practitioners, and such that I should have been cautious about publishing in the commencement of this work, but which I now feel quite sure none of my readers will desire to gainsay.

Let us now pass to the third part of this memoir.

THIRD PART.

Practical application of the Diagnosis of Diseases of the Heart to their Treatment.

Though the diagnostic result of our clinical researches is well calculated to satisfy an observing lover of his art, there exists an objection to the practical value of these researches; an objection grevious to a friend of humanity, and which, for my part, I have heard repeated so often that I would not be astonished if it presents itself at this very moment to the mind of the reader. The objection is this. The organic affections of the heart are now, and will always be beyond the resources of medicine. What then is the advantage of this nicety of precision, and of analysis in incurable diseases? What then is the good of ascertaining so perfectly the diagnosis of that which you will always fail to cure? What is the advantage of your paliative therapeutics, and your knowledge of the anatomical seat, or even the nature and degree of the lesion?

If all the diseases of the heart offered us these grave deformations of the valves, or of the orifices, which we have characterized by the double souffle, the vibratory tremor, the anasarca, &c., I would not endeavor to rebut the whole range of this objection. Indeed, without doubt, in cases of this nature, a local diagnosis is of small importance, when, on the one hand the general diagnosis, if I may so call it, is so easy; when on the other hand, the cure is so evidently impossible. But how true is it that all of these cases of disease of the heart are identical, under this double relation! Have we not just seen, in relation to pericarditis, of how many difficulties its diagnosis was sometimes susceptible? But will it be said of pericarditis, that it is one of the affections, in which the physician can shelter his defective diagnosis, behind the incurability of the disease? But treat only of the heart properly so called, though pericarditis associates itself without doubt, very intimately with its history; is it not only

in a differential point of view that to all the lesions of this organ, the terrible decree of Corvisart "*Hæret lateri lethalis arundo,*" applies itself equally and without appeal? Has any one forgotten the sanguineous concretions in relation to which there was questions in our last observations? It is true that in almost all of these cases we have seen them followed by a fatal result. But can any one think that it will be always so? Does any one think that a proper course of medicine will never overcome these kinds of foreign bodies?—This would be a serious error against which I can appeal to our twentieth observation. Finally this practical fact is of so much importance that I cannot hesitate supporting it here by two observations which appear definative to me, and which will complete the clinical history of this morbid production.

Observation 22.—*Temporary clots of blood in a patient attacked with an organic affection of the heart, and with emphysema.*—An old man aged 61 years, of a strong constitution but enfeebled by age, was brought to the hospital upon a litter, on the 17th of May, 1840. Having suffered for some days, and especially at this time, with a decided dyspnœa, the patient answered my questions with great difficulty, and in a broken voice. He said that he had always been very healthy. He complained only of a little weakness in his legs during the preceding year, and some dizziness for the past months. In going up stairs he also felt a little oppression and some palpitations. Since three or four days, this dyspnœa has so much increased as to decide him to come to the hospital.

Present condition.—His face was rather pale, his lips bluish, as were also his hands, which were cold; the jugulars were dilated, especially during expiration; there was no œdema of the lower limbs.

His inspirations rapid, not deep, dyspnœic, were 36 to 40 per minute. The resonance is quite good over the whole chest, but on both sides of the vertebral column there may be remarked a little prominence and the respiration is accompanied before, and especially behind, by a mixture of sibilant and even of disseminated subcrepitant rale.

The pulse is 89 per minute, irregular, intermittent, at one time small, at another well developed; there is no precordial prominence. The dullness is 4¾ inches in both directions.—The point of the heart is felt in the 5th intercostal space but obscurely. Its beats are of medium force. Its sounds, from

time to time, deep seated, quite dull intermittent, are nevertheless accompanied, almost all the time by a double souffle, very distinct in all the precordial region, propagating itself even beyond that, effacing the two clackings in the region of the bicuspid and aortic orifices, continuing itself in the region of the aorta, even to the upper portion of the sternum, but at this point, permitting the second beat to be heard, which is dry, and a little like parchment. In the carotids, the souffle of the first time is scarcely heard. Nothing very remarkable in the other conditions. I prescribed bleeding of sixteen ounces, and warm applications to the lower limbs.

The following morning the state of the patient was almost the same. The pulsation of the heart as it was on the preceding day; the dyspnœa still considerable; the speech broken; the patient breathes only when half sitting up in bed.

M. Bouillaud orders two blisters on the posterior part of the chest.

On the following day the expression was diminished, the pulse was regular, it became fuller, and its intermissions were few and far between, it fell to 68–72, and the respiration to 20 per minute without any remarkable rale. The souffle covers only the first sound, it has lost much of its intensity. Finally he says he is well, and on the first of June demands his discharge.

I think it is useless for me to make any long comments on this observation. Who cannot see that in this patient we had all the signs of a medium hypertrophy of the heart with lesion of the left valves and especially of the bicuspid? It is not our purpose to insist on this point of the diagnosis; but what I assert, is, that independently of these fixed and permanent lesions, we here had clots of blood temporarily arrested in the cavities of the heart, and it is by them that I explain this extreme dyspnœa, the anxiety, the coldness of the extremities, the dilatation of the jugulars, and the intermittence and irregularity in the contractions of the heart, the pulse at one time small, and at another, more developed; it may be that the bronchial rales will justify us in the belief of the existence of an emphysema.

Such was my diagnosis; and especially so when the amelioration in the symptoms was so plainly visible, when I compared the souffle noted towards the end to that which I had verified at the beginning; this difference having appeared to me much too decided not to have some other cause than the

difference, comparatively so small, the 84 pulsations of the day of his entry, and the 72 of the day of his departure.

Finally, if this fact may strictly leave some doubts, it will not be thus with the following case, which appears to me protected from every objection in the point of view which now occupies us:

Observation 23.—*General hypertrophy of the heart, with thickening of the valves.—Triple sounds.—Clots of blood in the heart.—Pulmonary Œdema.*

Antoine Cambrowne, nineteen years of age, a cabinet maker by trade, was received into our service on the 15th of January, 1841.

This patient, of a delicate constitution and lymphatic temperament, said he was attacked two years since, with palpitations, with dyspnœa, upon ascending an elevation, phenomena preceded, and, to all appearances, caused, as the patient himself said, by a general acute articular rheumatism, which had existed for two months. The following are the practical symptoms which I noticed on his entry:

No swelling of the face nor infiltration of the limbs.

The pulse at 80, of a medium fullness, with some inequalities or rare intermissions. Precordial prominence of two or three degrees of the cyrtometer. The point of the heart beats in the fifth intercostal space; and this beating extends as far as the lower portion of the sternum, where the finger feels some tolerably strong pulsations. The precordial dullness is about 3¼ inches square. The impulsion is strong and pretty well extended. No vibratory tremor. In ausculting the precordial region, one is struck at first with the hardness of the two sounds which are dry and like parchment—very distinct, without a very decided morbid sound; nevertheless the first sound is accompanied by a sort of roughness or friction, which somewhat resembles the souffle, especially so in approaching the lower part of the sternum. No souffle in the carotids; cough very rare, two sero-mucous expectorations. Resonance good throughout. The same is true of the respiration, which is nevertheless accompanied, partially, on the left and almost in all the height on the right, behind, by a moist rale with small bubbles, heard only at the end of respiration, and recalling in some degree, crepitant rale. On the next day M. Bouillaud noted, in his turn, the following phenomena. The pulse 64, tolerably full vibrating, regular, not double. The valvular sounds are rather dull, and at the same time, loud without distinct souffle, but they divide themselves clearly into

three by the doubling of the second sound. This triple sound, well marked in all the precordial region and the adjacent parts, is most distinct in the submammary region. The same crepitation a little humid. The chest is a little prominent behind and very sonorous. Some glairy, semi-transparent expectorations without tinge of blood.

Up to this time nothing is plainer than the diagnosis of this disease. We have, without a doubt, general and very considerable hypertrophy. We have, moreover a fibro-cartilaginous thickening of the valves without any sensible contractions of the orifices, and in the lungs perhaps an inflammation of the bronchiæ with tendency to emphysema.

Such at least was the diagnosis made by M. Bouillaud who prescribed, consequently, a bleeding of ten ounces, and cupping on the back, and both sides to the same extent, some pectoral ptisans and a portion with tincture of digitalis.

We remark, in relation to this diagnosis, that M. Bouillaud, contrary to his custom, does not point out the left valves as exclusively affected. Was it because the rudeness of the first sound, noted towards the inferior portion of the sternum, induced him to suppose that the right heart would naturally partake of the disease? I do not know but I would be so much less surprised if soon after we see him diagnosticate clots in the right cavities especially. As for myself, I confess that the lesion of the right valves appeared to me to be here a very probable coincidence, and I was even tempted to think that this lesion was concerned in the production of the bronchial rale, which, in this hypothesis would be rather a sign of œdema resulting from a little hindrance of the cardio-pulmonary circulation, and would rather be a sign of œdema than a symptom of the bronchitis with emphysema admitted by M. Bouillaud.

As to the nature of the valvular lesion, the tone of the sounds, and the absence of the souffle did not allow any one to mistake a considerable thickening of the laminæ, without deformity, vegetations, &c., and as M. Bouillaud said, without any considerable contractions of the orifices. I wish it to be observed in relation to this subject, that we here have the triple sound; this triple sound may exist without that bicuspid contraction which I have mentioned above.

I will add finally this last remark, which confirms those already made, viz: that the triple sound is perceptible only in the condition of a certain abatement of the pulse; absent at the entry of the patient with eighty pulsations, whilst

there then existed especially in the right cavities a sort of raspy friction in the first time; this triple sound displayed itself on the next morning, the pulse having fallen to 64, and the rude sound of the day before having cleared.

The phenomena noted the following days sustain this remark, at least as far as it concerns the rasping sound.

Thus on the morning of the 15th, the pulse is at 72, the triple sound continues, but with a hard and rude tone. These are the expressions of M. Bouillaud; the following days the pulse falls to 56, and there is no longer a question of this peculiarity, the triple sound being noted, on the contrary, as perfectly distinct. Finally, under the influence of cupping and bleeding on the back part of the chest, the crepitation disappeared completely; and on the 20th of January the patient felt well enough to remain out of bed without our permission during more than three hours of the afternoon.

Here commences that part of this observation which especially interest us, and in fact in consequence of this imprudence, the patient, who had had cold feet, was seized with considerable dyspnœa: and when I arrived to visit him that evening, I found him suffocating, his respiration anxious, 36 per minute, his face and body covered with a profuse prespiration, the pulse 128 and vibrating, the sounds of the heart distinct with rude souffle in the first time; the resonance is good over the entire surface of the chest, but I heard on both sides, even in front, a humid and abundant crepitation with a mixture of sibilant rale, behind and to the left, without pain in the side, the expectoration purely mucous. I prescribed immediately a bleeding of twelve ounces and mustard plasters to the feet.

On the morning of the 21st M. Bouillaud noticed the following.

The relief afforded by the bleeding was but momentary. The oppression and anxiety are very great this morning: sleeplessness; abundant sweat during the night; paleness; pulse 120, regular, sufficiently vibrating, and contrasting by moderate developement with the force of the beatings of the heart. The sounds of this organ are perceptibly more obscure and more concealed towards the right than towards the left. The first is a little rough but without any distinct souffle at this time. The triple sound no longer exists. Respiration is at 40. Crepitation in the whole chest with tendency to souffle behind, which is owing to the frequency and force of the respiratory movement.

The resonance is tolerably good throughout. Expectoration is glary. The clot of yesterday firm and glutinous and without buff. The serosity is somewhat turbid. Bleeding of eight ounces, cupping upon the chest of ten ounces.

The 22d; the patient is better; the dyspnœa and anxiety have disappeared; the pulse is at 84 and well developed; the sounds of the heart less forcibly struck and not so rude; the triple sound has not again reappeared; crepitation less abundant behind, none before; resonance pretty good; the clot firm, glutinous and covered with a thin buff; the rondells of the cupping glasses are united in a clot of medium resistance.

The 23d; Improvement continues; the pulse is at 76 to 80; return of the triple sound but not so marked as before; yet a little crepitation behind.

The 24th; Patient doing well; triple sound returned; pulse at 68.

The 29th; Being charged with the morning visit, I find our patient in a state of dyspnœa worse than any we had observed. Half setting up in bed, he tossed about, uttering groans and even cries; his face pale and covered with sweat, as was also his body; his lips blue, his eyes half closed, and his nostrils dilated. Respiration at 48. Crepitation has reappeared in the whole chest. The pulse is small, contracted at 128 to 132. The sounds of the heart were rudely struck, without notable souffle, owing, perhaps, to the difficulty of analyzing them, resulting from the excessive quickness. The triple sound has disappeared.

We were told that this crisis commenced the evening before, the patient having eaten an excess of food brought from without.

I prescribed a bleeding of eight ounces, and blisters to the interior surface of the thighs.

The 30th; Continuance of the condition of yesterday, which has continued without interruption. The pulse, almost imperceptible, is at 108 to 112. The beats of the heart strike the hands with force. Nothing new in regard to the sounds of the heart except that they are notably concealed. Respiration is still accelerated and very high. Before as well as at the back of the chest there is heard, throughout, the firm and humid crepitation before spoken of. The extremities are cold; the patient is restless: says he is suffocating.

Persuaded for my part that he is devoted to an inevitable death, I deplored the slowness of the approach of asphyxia; and not daring to return to blood letting, I ordered two blis-

ters to the posterior part of the thorax, mustard plasters to the feet, an infusion of Linden-flowers and a potion of æther.

The 31st; The symptoms are abated. Patient is stretched on his bed; the pulse is full, regular and at 68 to 72; the sounds of the heart are perfectly defined; they are no longer concealed, and in this respect they differ singularly from those of yesterday.

M. Bouillaud added then to his first diagnosis,—

Latterly *Capilary Bronchitis to the left and diseminated pneumonia. Probable concretion of the heart and especially in the right cavity.*

We will add at once to terminate this history, which has been rather long perhaps, but the interest of which will probably excuse the narration, that these crises of dyspnœa returned no more; but that first an erysipelas of the right arm and afterwards a rheumatismal swelling of the left knee, and of the right wrist kept the patient in our service until the 2d of the following May. During this stay I noticed many returns of the triple sounds spoken of; and I found, besides, on the 24th of February, a souffle of the first time in the inferior hollow in the sternum, ceasing to be hard when you passed that point. The 2d of April this sternal souffle is even accompanied by a distinct purring. Finally, the 2d of May the day of his discharge, there could yet be noticed a souffle of the first time in the right cavities; and some sounds, very dry and like parchment in the region of the left cavities.

What need is there of commenting on this observation? Can not any one tell that it presents to us a perfect history of concretions in the heart.

And finally, is not his interest assuredly very small, who does not see, after this fact, that if clots of blood can be deposited in the heart before death, it is not less true that, with suitable treatement, they can be removed or absorbed, and often very quickly? Of what great importance then is this point of diagnosis to the practitioner? Let us remark also that in the point of view of the symptomatological study of lesions of the right side of the heart, this fact is to be added to those we have pointed out above, in which the morbid sounds were heard, especially towards the lower hollow of the sternum.

Let us also note the gradations presented in our patient in relation to the constancy and tone by the morbid sound so well localized and perhaps responding, according to my notion, to the orifice of the pulmonary artery, increasing gradation

with him, and to which the sanguineous concretion could not have being foreign.

I will finally conclude with a last remark. It is, that I confess it is difficult for me to explain, with M. Bouillaud, the humid and general crepitation, so ready to reappear at each of the crises ; so ready also to disappear with them, by a disseminated pneumonia and even by a capillary bronchitis, an affection always so tenacious and often so rebellious against the most energetic medications.

The characteristics of the expectoration, the absence of dullness and some previous observations, analogous and verified by autopsy, induced me to view it rather as a case of acute pulmonary œdema, a disease better known, and more observed in general under a slow and chronic form, but, in my opinion, not the less real ; at other times very rapid in its progress, compromising, in some instances, the existence of the patient, but also having this advantage ; that connected sometimes, as in the present case, with a stoppage, sudden and momentary, of the venous circulation, it will disappear very quickly if the obstacle itself is removed. This and the preceding observation demonstrate, then, the great practical importance of knowing how to diagnosticate, and how to separately oppose, when necessary, these sanguineous clots, an epiphanomenon grave and, it may be said, very frequent in the organic diseases of the heart. But how much more apparent does the importance of this become when we reflect that these morbid productions are not less possible in a large number of other diseases, such as pneumonia, pleurisy, rheumatism, &c. ; diseases in which a daily examination of the heart can only, very often, give us the key of certain febrile conditions which seem to survive their original cause and in which every one has so often seen an astonished examiner recur, for want of a more exact diagnosis, to the idea, so often chimerical, of a diathesis.

Again, how much better will this necessity of an exact appreciation of what passes in the heart, be demonstrated to us if I add that in all of these diseases, frequently, in the place of sanguineous concretions, that is to say of disorders with very decided physical signs, we meet, as a complication of them, a beginning endocarditis ; the primary origin of so many incurable lesions, and which then only reveals itself to us by signs which a practiced ear alone can catch ; this disease being, I may say, as difficult to diagnosticate at its commencement as it is important to oppose at this period of its devel-

opment. I have at hand very numerous observations corroborating this coincidence between a disease of the heart and a phlegnasia. I have even among other facts, not only in my recollection but under my eyes at this moment, a case, the only one, it is true, of a typhoid fever, in the course of which an organic souffle announced to us the very unexpected complication of a disease of the heart. I cannot relate all of these cases, but will content myself with merely mentioning them, There is one, however, which I will take as an example, because it will offer this curious peculiarity which we will then perceive without a possibility of a doubt, a disease of the heart commencing under our eyes, and very soon, thanks to the active treatment suggested by its diagnosis, to disappear in some way without leaving any traces of its existence.

Observation 24.—*Acute articular rheumatism; rasping souffle at the bicuspid orifice soon after the entry of the patient. Chlorotic souffle at his departure.*

Edward Papler, a hair-dresser, aged twenty three years, was received into our service on the 25th of May, 1841.

This young man of an average constitution, of a lymphatico-sanguineous temperament, was attacked one year since by an articular rheumatism, general and febrile, which deprived him of all movement during seven or eight days, and lasted six weeks.

Treated at the "la Pitie" hospital by bleeding, laudanum, cataplasms and opium pills, he was discharged relieved, but some pains still remaining in the fingers and toes. He remained besides subject since then to feeling vague pains, and experiencing palpitations whenever the weather changed.—Six days before, without any known cause, he was attacked by pains in the two wrists, which quickly localized themselves in the right wrist; accompanied by a little chillness and febrile heat. The following was the state in which we saw him:

The right wrist as well as the hand was of a diffused redness and of a temperature manifestly higher than that of the opposite side. It presented an evident tumefaction, expressed, in comparison with the left wrist, by a difference of 2½ lines. The subcutaneous veins on the diseased side were more prominent than those of the sound. The pain was almost continued, very acute and increasing on the least movement. The face generally quite pale and meagre as is also the whole body. Nothing remarkable in the digestive or respiratory passages. The heat of the trunk is moderate and a little moist. The

pulse is at 96–100, full and vibrating, especially in the right radial where it is preceptibly more developed than in the left. No precordial prominence. No displacement of the point of the heart—no abnormal dullness. The impulsion is very distinct, but moderately extended and without vibrating tremor. Finally, the sounds of the heart are regular, well struck and very distinct, *without souffle*—no bruit de diable in the carotids. I prescribed a bleeding of 12 ounces.

In the morning (26th) the patient feels himself relieved; he had slept better; the hand and the wrist are less red, and rather less swollen; there might be remarked a slight roseolar eruption towards the middle of the posterior face of the radio-carpal articulation. The veins are still developed; the pulse is at 84, tense full, resisting, and, like it was yesterday, evidently fuller in the right than the left; the precordial dullness is perfectly normal; but in the region of the left cavities there was heard this morning for the first time a well marked souffle, concealing almost entirely the valvular clacking a little rude, rather rasping, perfectly distinct towards the left auriculo-ventricular orifice, then diminishing in intensity as the sternum was approached and even disappearing almost entirely towards the summit of the chest, and then being replaced by a very distinct clacking sound. The clacking of the second time is, on the contrary, without souffle and distinct. No trace of souffle in the carotids or subclavians, in which there was heard, by propagation, a double clacking, the first sound of which is without notable souffle. No precordial pain. The clot of yesterday showed a very thin buff. The serosity is rather turbid.

Let us stop here some moments. The results of this second examination were, relatively to the condition of the heart, so different from those of the day before, that M. Bouillaud desired very much, before dictating that which precedes, that I should auscultate in my turn; and hardly had I applied my ear, when I heard and announced, in fact, a souffle of the first time, such as had been described. I was even so much struck with its rudeness, that not being able to think that it dated only from the preceding night, I attributed it immediately to the attack of rheumatism which supervened one year before, and since which the patient had still some palpitations, presuming that this souffle had apparently escaped me the evening before, I even avowed this supposition to M. Bouillaud, who repeated it in his public lecture in terms too flattering for me to mention here. And, notwithstanding this supposition, I only stopped myself with reluc-

tance from denying the existence of a souffle, the existence of which so many reasons had induced me, in advance, to admit and almost positively to assert, when I thought of the minute care which I had used the day before, having decided only after prolonged examination, and after being well convinced of its absence. Finally we shall now see what will happen from this souffle.

M. Bouillaud, wishing suitably to oppose both the actual local manifestation of rheumatism, and the internal inflammation shown by the fullness and vibration of the pulse, and the state of the heart itself, recent, perhaps, and indicated by the souffle, prescribed a bleeding of 12 ounces, and cupping on the wrist and hand of 8 to 12 ounces.

The 27th, the patient was better; he moved his hand much more easily, and the swelling and redness of it were again diminished. He, however, felt some new pains towards the shoulders, in the right arm and in the left fingers. Besides this, the heat of the skin was very moderate; the pulse, less tense, less prominent than the day before, had fallen to 72–76. Auscultation often tried, could hardly distinguish, at the end of the first time, any vestige of the rasping souffle, which, the day before, entirely concealed the clacking. There was heard on the contrary the first sound well struck, and the change since yesterday, to use the words of M. Bouillaud, could not have been greater. There was no souffle in the carotids or subclavian arteries. The clot is very much retracted, with the buff coat a little cupped up, and of medium thickness. The rondelles are united in a mass tolerably glutinous, and the serosity is not red.

Could any one doubt even that the souffle of the preceding day was not really a souffle of new formation, and the positive index either of a begining endocarditis, having already thickened the bicuspid valve in a manner to impede its proper action; or of some fibrinous concretions deposited upon the laminæ, and producing the same result? No! doubtless none but a morbid sound of very recent date could disappear in so short a time; but this success was also a powerful motive for following and completing the cure even at the risk of impoverishing momentarily the mass of the blood. M. Bouillaud then did not hesitate to order a new bleeding of 12 ounces, induced moreover, besides the important indication I have mentioned, by these new pains, vague as yet, but which could well show that the rheumatismal flame was not yet extinguished.

And, in fact, that which proved to us that this second indication was as real as the first, was that on the 28th, the pains of the left shoulder were more acute than on the previous day. There has supervened, moreover, a little soreness of the throat, with a slight swelling of the right amygdala, a redness of the pharyngeal membrane. The clot is very much retracted with thick and cupped buff. Nevertheless, the diseased hand and wrist have returned to a normal state. The pulse is at 68–72, and the first sound of the heart is even more distinct.

This time the only danger which existed was that of a return of the rheumatism, but even this was a sufficient motive for action. M. Bouillaud therefore ordered a final bleeding of 12 ounces.

The 29th. The patient is well; there existed no pain except that of a slight sore throat. The pulse is at 68; the first sound is as well struck as the second, without the mixture of any distinct souffle. M. Bouillaud gave him some broth.

The 30th. Improvement continues; the pulse is at 60; nothing new in relation to the heart.

The 31st. The pulse is at 60; there was noticed a very slight souffle, soft, chlorotic, and terminating the first sound, the clacking of which is very distinct. This souffle which extends in to the substernal aorta, coincides with a well marked bruit de diable in the left carotid. With this exception the patient does very well.

The 15th of June he demanded his discharge, being perfectly cured. There was yet heard a distinct bruit de diable on the left, in the sitting position only, and a slight souffle, very distinct but chlorotic at the first time of the heart towards the aortic orifice, whence it extended into the substernal aorta. There existed no sign of any organic lesion of the heart. Is it possible, I ask, to meet a fact more remarkable in every respect? and was not each particular of it worthy of interest, even to this chlorotic souffle, supervening towards the end of the treatment as if to dispose of itself in favor of the organic nature of the rasping souffle which had preceded it, and to confound for once more those critics of whom I have spoken above, who assert that M. Bouillaud in his observations could not well know how to distinguish these two souffles from one another?

I conclusion; that which I wish to be well observed in this case is, that instead of knowing how to make a precise diagnosis, M. Bouillaud has been able to cure an organic dis-

ease of the heart in its commencement; that there are then amongst these grave lesions some cases in which our therapeutics are not purely palliative.

But without wishing to dwell here for an etiological discussion, which would take us too far from our subject, let us examine our twenty-three preceding observations on the diseases of the heart, in reference to the probable cause; and what do we find? Seven times this cause was unknown, twice it was traumatic, five times a catarrh or an acute bronchitis, and nine times a rheumatism. Here then are 16 out of 23 where every thing induces us to believe that an endocarditis, which doubtless passed unoticed, was the starting point of these sad diseases becoming at a later date the opprobrium of our art, which when commencing might have been arrested if we had known how, first to diagnosticate, and then to combat them.

These practical considerations respond victoriously to the objection which we contradict, and are sufficient to sanction all that our diagnostic studies can seem to offer of scientific precision, and, I will say, almost of exaggerated pretensions. Who in fact does not understand the usefulness or, I should rather say, the necessity, in cases such as I have analyzed, of the habit of these special explorations, of these minute analyses in the most complex cases, of which we have shown the means and the result?

But I now say more; in exercising ourselves in this kind of diagnosis of the diseases of the heart, whatever may often be the symptomatological obscurity in which they envelop themselves, in studying to discover these affections whenever they are present, we prepare ourselves even by this, to know how to determine with certainty the cases in which they are not, whatever may be the functional disorders which seem to announce formally to us their existence; and in how many cases does this negative diagnosis require as much experience as the affirmative! It may be divined that in this place I wish to speak of nervous palpitations, and in particular of chlorosis, a disease insidious in its symptomatological manifestations, and which, under different forms, causes inexperienced practitioners to imagine it one of the affections of the centre of circulation. Shall I mention in relation to this, one of our most distinguished apothecaries of Paris, who, believing himself, from the opinion of his physician, affected with an organic lesion of the heart, referred to this cause, very frequent palpitations, pains in the precordial region, suffocating sensations, &c., and in whom all these symptoms have disap-

peared two years ago without returning, because I persuaded him to oppose them only by means of antispasmodics, or rather because I told him, and I have been happy enough to make him believe, that his organic lesion was purely illusionary? Shall I mention one of our chlorotics, received into our service and come to Paris to be cured of an hypertrophy of the heart which did not exist, and against which the principal physicians of one of our northern cities had expended all the resources of antiphlogistic medication, and all the pharmaceutic combinations of digitalis?

I cannot tell with how many similar facts I might support this demonstration. I do not exaggerate in affirming that, in the two years of my practice, not a week passed without our receiving into our service many of the unhappy victims of the error in diagnosis of which we speak. Shall I say also, that if simple cases of chlorosis were very often sent to us as diseases of the heart, sometimes, also, in consequence of an inverse mistake, I have seen, what is more astonishing, real organic diseases of the heart, very grave and already far advanced, sent to us for chlorosis?

And it is when like errors happen every day; when some gave iron in cases which need bleeding and digitalis; when others bleed, when, on the contrary, the blood should be strengthened, that they ask us what is the advantage of our precise studies, and our minute researches upon questions so teeming with mistakes not less shameful to the physician than dangerous to the patient! And it is this very class of people, who err in this way, who reproach us with wishing to throw an excess of light, a superfluous glare, upon the path which they so blindly tread.

Finally, I believe I have said enough to reduce their objection to its proper value. I believe that I have sufficiently demonstrated, that, if in presence of certain organic lesions of the heart we are all now, and ever will be, it is true, equally powerless, it is not less incontestible that, with the exception, of these sad circumstances, there are yet some therapeutic palms to cull—more of practical success to attain; and that this part is large enough to repay us worthily, the pains and efforts it will cost.

Happy am I in my own estimation, if I have thrown any light, in this memoir, upon any clinical questions; and especially if I have stimulated the zeal of our young practitioners, for the diagnostic studies which constitute, in my mind, one of the most beautiful parts of our art.

41C 496